

BEAUTIFUL GARDENS

Works by WALTER P. WRIGHT.

Pictorial Practical Gardening.
Pictorial Practical Fruit Growing.
Pictorial Greenhouse Management.
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A FORMAL GARDEN IN THE ITALIAN STYLE ON THE RIVIERA.

BEAUTIFUL GARDENS

HOW TO MAKE AND MAINTAIN THEM

MODERN ARTISTIC FLOWER GARDENING, WITH PLANS,
DESIGNS, AND PHOTOGRAPHIC ILLUSTRATIONS AND
COLOURED PLATES. SELECTIONS OF BEAUTIFUL
FLOWERS GIVEN, WITH PARTICULARS OF
HOW TO GROW THEM

BY

WALTER P. WRIGHT

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In this work I have endeavoured to give expression to the principles which I have practised for the past few years in a Kentish garden, with results that my visitors have said to be satisfactory. At the cost of a few pounds in trenching soil and manuring, large areas of waste have grown into beautiful gardens as though by magic, with a moderate outlay on plants.

It is woful to see the starved and wretched scraps of plants which are grown in many "advanced" gardens, and which no system of "grouping" can ever make beautiful. Personally, I cannot take pleasure in any plant that is not healthy, vigorous, and a good specimen of its kind. The fact that a bad plant is present in thousands only makes the spectacle it presents more mournful.

I trust that many readers will divert the manure which so often goes to making vegetables coarse to the flower garden, where, in combination with trenching and frequent division, it will give glorious breaks of colour. Thus beautiful gardens will be furnished at a quarter the expense that they now entail. They will be artistic in the best sense.

WALTER P. WRIGHT.

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BEAUTIFUL GARDENS.

PART I.

PLANS AND PLANTS.

CHAPTER I.

ON THE IDEAL HOME GARDEN.

By the time the average man is able to contemplate making himself a garden the age for ideals has apparently departed. He has "come to forty year," and tasted the bitterness of seeing the illusions of his youth pass away one by one. He finds himself hard put to it to take a gracious and charitable view of life. His outlook is grey.

To such a man the garden is fraught with immense possibilities. Wisely planned, prudently designed, it may conceivably fill that great and terrible void which so often appears at middle age. It may open the gates of a new and beautiful world—a world in which imagination and illusion play an allied part with all the vigour and *abandon* of youth.

The imaginative mind is, of all others, the

one most likely to suffer rude shocks as age and experience increase. While imagination is sheltered by illusion there is always a chance of happiness, but when experience destroys illusion imagination is left naked and unprotected. Stupid people may be happy in any walk of life. Riches are not necessarily a source of unhappiness, any more than poverty. The reason that millionaires are unhappy is not that they are millionaires, but that they are not stupid. Given a millionaire who was as stupid as a Suffolk ploughman, he would be equally happy. The millionaire is generally unhappy because his imagination has developed as his illusions have faded.

It is because the ideal garden provides so rich a field for imagination to roam in that it offers such boundless possibilities of happiness. Diocletian proved his profound wisdom when he voluntarily abandoned all the glories of the imperial purple to tend a Cabbage bed. The "Meditations" of Marcus Aurelius show how a powerful intellect is mellowed by a knowledge of plants. And there is comfort for the old in the declaration of Cicero that "the pleasures of husbandmen are narrowed by no age."

Writers so eminent, yet so diverse, as Epicetetus and Petrarch, Luther and Machiavelli, Milton and Voltaire, Gibbon and Pope, Swift and Pepys, Addison and Rousseau, Francis Bacon

and Congreve, Chesterfield and Horace Walpole, Cowley and Jonson, Gray and Shakespeare, Shenstone and Crabbe, have declared their joy in the garden. As to gentle John Evelyn, Tusser, Parkinson, Temple, Lawson, Tradescant, Gerarde, Ray, and, in more recent times, Kent, Loudon, Paxton, Blackmore, and Hole, we look upon them almost more as gardeners than garden writers—rather describers of the work they have done than of the abstract pleasures of the garden.

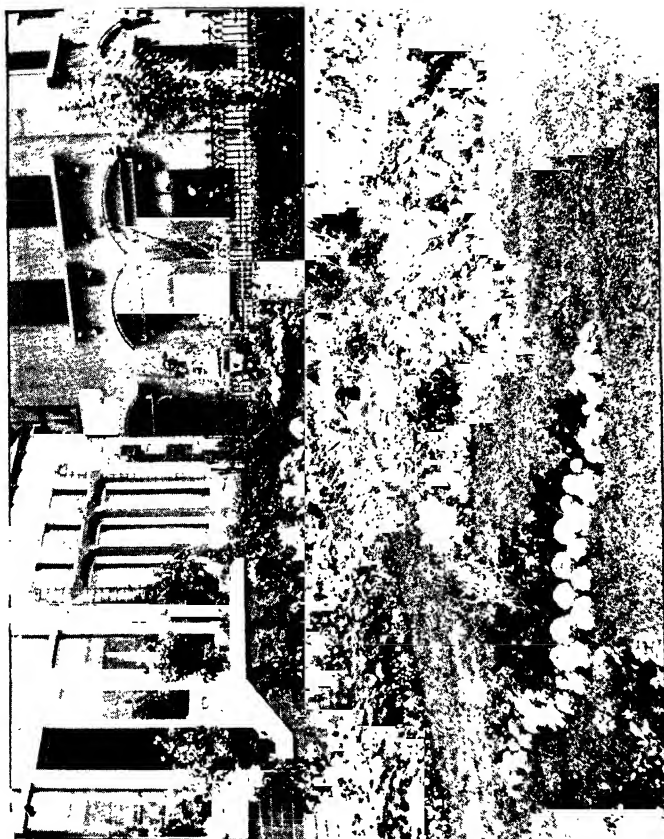
The hearts of thousands will go with Abraham Cowley when they read the words he wrote to Evelyn: "I never had any other desire so strong, and so like to covetousness, as that one which I have had always, that I might be master at last of a small house and a large garden. . . . But several accidents have disappointed me hitherto. . . . I am gone out from Sodom, but I am not yet arrived at my little Zoar."

Out from Sodom—out from the world! Cowley had made one step on the road. He sighed, we see, for a large garden—a small house and a large garden. Is our Ideal Home Garden to be a large one, too? Shall our "little Zoar" run to many acres, or shall it be merely a few roods? We will glance at considerations of size in a practical way presently, but meanwhile let us lay to our souls the sweet assurance that it is not in size alone that garden pleasure lies. The garden will be the Ideal Garden when, and

only when, it conforms to the means and the capacity of its proprietor. A garden is no ideal one which brings its owner to the verge of bankruptcy, or so overtaxes his physical powers as to make him prematurely worn and aged. It must be a beautiful garden and a fruitful one, and it must bear upon its face the clear impress of its maker's own handiwork, but it must be a garden of pleasure and peace, not of painful and anxious care.

Our Ideal Garden shall come close to the walls of the house, and linger lovingly there, as though it were indeed a part and parcel of our home. It shall caress the walls, lay tender fingers upon the windows, and spray itself across the threshold. It shall lie all about the dwelling, so that it is seen from every casement. There shall be no ugly gaps, unkempt corners, or bare walls. Where the house goes, there the garden shall follow. It shall surround us everywhere.

Our Ideal Home Garden shall be a garden of perfume. There is nothing that recalls more swiftly and vividly a happy incident or scene of childhood or youth than a pleasant odour. When we merely think of that incident it appears faint and indeterminate; when it comes on the wings of fragrance it throbs with life. Modern rock-gardening does not give us full, rich garden odours. Many Alpine gems have



THE GARDEN SHALL COME CLOSE TO THE WALLS OF THE HOUSE" (See page 4)



IT SHALL BE A GARDEN OF COOL AND SECLUDED PLACES (S. 100, 101)

A ROSE ARCH NEAR A POOL OLD GARDEN PARK, BIGGLESWADE

perfume, it is true, but it is faint, and dispersed so imperfectly through the cold air of spring as to fail in sweetening the garden. We must have colonies of Violets, of Jonquils, of Lilies of the Valley and Wallflowers, of the scented Gardenia Narciss, for our spring fare; to be followed by Pinks, Cabbage Roses, Bergamot, Lavender, Jasmine, Carnations (not the scentless yellows), Heliotrope, Honeysuckle, Humea, Musk Mallow, Night-scented Stock, Mignonette, Sweet Peas, and Stocks.

Our Ideal Garden must be diversified and varied. Perhaps we shall make it a series of gardens within a garden, separated by Hawthorn, Privet, Sweetbrier, Myrobalan, Yew, and Holly hedges. If so, each garden must have its distinctive name and its own separate treatment. There will be constant charm in passing out of one into another, through wickets, or under arches. But even if it is only a small plot we must have diversity in it. A garden of desolating rectangles, with straight-up-and-down paths and borders, it shall not be.

It shall be a garden of cool and secluded places, for in it we are going to seek refuge from the glare and bustle of the workaday world. We may not manage a Pleached Alley like that at Hatfield, but the odds are that we can fashion a pergola, with a quiet seat at the end of its cool length. At the worst we can shape an arch,

and, twining the shoots of a Crimson Rambler over it, form a pleasant Rose bower.

And our Ideal Garden shall be planted so that we have beauty all the year. Little colonies of yellow Winter Aconites, of Snowdrops, of Squills, of Glory of the Snow, of earliest Irises, shall precede our Daffodils, our Hyacinths, our early herbaceous flowers. Even winter shall have its colour in the leafage of Barberries, variegated Box, Golden Euonymuses, Hollies, Golden Arbor-Vitæ, Golden Yew, Golden Privet, and feathery Cypresses; and in the blossoms of the sweet Winter Honeysuckle, *Lonicera fragrantissima*; the Winter Jasmine, *Jasminum nudiflorum*; the Winter Heliotrope, *Petasites* (*Tussilago*) *fragrans*; and other things that snatch periods of bloom from the hostile calendar. Autumn, of course, will be rich with Michaelmas Daisies, hardy Chrysanthemums, Red Hot Pokers (*Kniphofias*), Sunflowers, and that generous sprinkling of lingering Roses which there will be if selected Teas and Hybrid Teas are grown.

In all, and through all, it shall be as much a part of our lives, as close to our hearts, as tightly bound up with our homes, as love itself is. Only in this holy intimacy shall we taste its pleasures to the full.

CHAPTER II.

ON GARDEN ART.

CHARLES DICKENS is said to have once added the following warning to a letter of instruction to a contributor: "Mind! no cant about Art."

It is to be feared that there has been a great deal of cant about "Garden Art" these latter years. Artistic gardening consists in putting the right plant in the right place, and growing it properly when you have got it there! If people talked less about abstract art in gardening, and delved deeper, there would be more beautiful gardens than there are at present.

The wrangling between the "formal" and the "natural" schools of gardening is a very old business. Pope, Addison, and Horace Walpole led the revolt against formal gardening, perfected, though not founded, by the great Le Nôtre. Under their influence a powerful "landscape" school grew up, taught by Kent, "Capability" Brown, Humphrey Repton, and others. At various periods there have been violent reactions. The middle of the nineteenth

century found the bedding system in vogue, the end saw a wave of hardy plant culture sweep over the country.

It was acutely remarked by Lord Byron that English gardening has grown up rather under the influence of our great writers than of our landscape painters. He doubtless had particularly in mind the satires of Pope. But in submitting themselves to the influence of the poet of Twickenham, our forefathers committed themselves to developments by a negative process. Instead of progressing by working to an ideal they did so by avoiding what was set up as an enormity. Now, the negative process in an art so inherently constructive and plastic as gardening has transparent defects. A nation could never build up its character merely by criticising the defects of other countries. Gardening is essentially a working art. It cannot be directed from the study. It lives of its own inspiration. It is because the literature of gardening is so extensive that the execution of it is so imperfect.

How slowly the negative system works is shown by the fact that although some 200 years have elapsed since Pope's pungent satire at the expense of clipped trees was penned, the early years of the twentieth century have seen a considerable extension of topiary. We really ought to busy ourselves in building up beautiful gardens

QUARRY AND CATARACT GARDENS. 9

with the help of our mother wit, and in consonance with our immediate circumstances and surroundings, and not worry ourselves with the strife of factions. English gardening will advance, and gradually evolve a national character, when people learn that their first lesson in the making of gardens is to go forth into the open air and straightway turn a sod, rather than to deride, by the fireside, the work of London and Wise.

The jangling of the factions is as tiresome as it is futile. In view of the antiquity of the crusade against formal gardening the pretension of some modern critics is painful. It might be thought that such beings as Pope and Addison had never existed. We are asked to believe that "gardening by nature" is a recent discovery, like wireless telegraphy and radium. Gardens are packed with huge stones until they resemble the face of a quarry. Cataracts of a pint or two of water fling their tumultuous spray into a ten-inch basin. Any weed becomes a gem so long as it comes from the mountains.

One may loathe the bedding system and topiary, and love hardy flowers, without acknowledging the dilettantism of many modern writers. There are quarry-and-cataract gardens which are quite as much affectations as, and more costly than, formal gardens. They domineer over the natural character of the place, which

is pummelled and packed until it assumes a form that is totally foreign and incongruous.

A beautiful garden cannot be made out of timeworn sarcasms at the expense of ribbon borders and platitudes about the formality of clipped trees. It calls for real, concentrated effort. It demands the best that is in a man or woman.

Until we have learned that the plant comes first—that only when it is well grown, and given a suitable environment, is proper gardening carried on—we have not learned what garden art means. One may see two tons of stone used to form a corner for one tuft of *Primula rosea* ! Nature does not generally do this sort of thing, and when she does she is teaching us not what to imitate, but what to avoid. Nature, indeed, may be a good theorist, but a bad gardener. She does not grow good plants, as a rule. She crams them together, so that they become weak and drawn, flower prematurely, and soon run to seed. Her object is not beauty, but reproduction.

With the never-ending feud between the formal and the quarry-and-cataract factions, the modern flower gardener has no real concern. He is well advised who cries: "A plague on both your houses," pursues his own course, and turns his attention to what is, after all, the real task—the selection of as many good plants

as he can cultivate well, and giving them the best conditions for growing in a healthful and beautiful way.

By giving plants free scope and abundance of food they attain to dimensions, and give a quality of bloom, totally unsuspected by those who treat them in the ordinary way. An acre of garden could be maintained in magnificent beauty for many months of the year at a small annual cost by choosing, besides shrubs, such things as Ox-Eye Daisies, Paeonies, Goat's Rues, *Boltonia asteroides*, *Statice*, Sunflowers, Pinks, *Heleniums*, Poppies, *Phloxes*, *Pyrethrums*, Fox-gloves, Snapdragons, *Columbines*, *Michaelmas Daisies* in great variety, and *Kniphofias*—plants which assume stately proportions, or bloom long and profusely, and are readily split up, when generously handled.

With beds and borders of good hardy plants, large or small according to the area of the garden, with an arch of *Roses* here, a pillar of *Clematises* there, a clump of *Sweet Peas* yonder, a quiet pool, a modest rock bed, the whole provided with a suitable foil of good turf, a beautiful garden is secured and maintained at a small cost, as "Beautiful Gardens" will essay to prove.

CHAPTER III.

ON THE SIZE OF GARDENS.

THE temptation to have too large a garden is much greater than to have too small a one. By a process of reasoning that is not quite convincing, a man frequently persuades himself that he must have a small house in order to keep down expenses, but will "make up for it with a nice large garden."

It is with this leading principle before them that many people quit town for country life. The "nice large garden" can certainly be maintained at a small cost, but one has to know how to do it. As much money can be wasted over a garden as over a yacht or a motor-car.

Disillusion has followed in the footsteps of many a townsman over this matter of the garden. He has perhaps planned to do the light work himself, as a pleasant hobby, and to get a man in occasionally "to do the rough jobs." In this way he has intimated that he can manage two acres easily, apart from a meadow and a poultry run. He has proposed to himself to have a



INEXPENSIVE GARDENING—A HUGE CLUMP OF BOLTONIA ASTEROIDES IN THE AUTHOR'S GARDEN, SHOWING THE EFFECTS OF CULTURE. THESE BOLD MASSES GIVE SPLENDID EFFECTS AT SMALL COST 18, p. 100, 111.

The end of it all is that the unhappy townsman pronounces country life in general, and gardening in particular, to be a delusion and a snare. He quits the village a saddened man, one more happy illusion—perhaps the last—dispelled for ever.

The remarkable thing about these cases is that they often occur with men who have had a business training, and might be expected to know better. A merchant in a large way of business knows that he cannot simultaneously work his own typewriter, keep his own books, pack his own boxes, and deliver his own goods. He has to employ typists, clerks, warehousemen, and carmen. Yet the same trained mind will contemplate the two-acre garden, meadow, and poultry run, without a doubt or tremor.

A man with two acres of garden that is to contain fruit, vegetables and flowers, not to speak of glass, is in a large way of business. He cannot have the garden trim and well furnished without the full services of an expert gardener, who will need extra help at certain periods of the year. Let that fact be grasped first. Pope's five acres were not worked by the "little, pale, crooked, sickly, bright-eyed poet" in his leisure hours with no more help than that of a Twickenham amphibian one day a week.

Obviously, where cost of upkeep is a primary object, the garden must be greatly reduced in

size, but to this the objection may be raised that sufficient privacy or seclusion cannot be secured. There is a way out of the difficulty. Procure a fairly large piece of ground by all means, but instead of making most of it garden lay the greater part down to pasture, and feed it off with sheep, taking an occasional crop of hay. Make part of it orchard, if the soil is good enough, by planting some standard Apples, and twist wire netting round the base to prevent the stock from nibbling the bark, or fence off the trees altogether. If it is not suitable for fruit trees, a semi-garden or park-like aspect can be imparted by planting clumps of shrubs here and there, and fencing them, also by naturalising Daffodils in the grass.

Where ample means exist for providing abundance of skilled labour the objection to a large garden passes away, but in all cases where economy has to be considered a prudent and practical view should be taken. Immense pleasure can be derived from a garden of only an acre. A good supply of vegetables, plenty of delicious fruit (if the soil and aspect are suitable), and large supplies of beautiful flowers can be got from a garden of this size. Nay, half an acre will yield all if it is judiciously laid out and cropped. The great point to remember is that it is not area alone which settles the question of success or failure, but good judgment, good

taste, and wise planning. The illustrations have been chosen with a view to proving that equally pretty and artistic effects can be got in small as in large gardens. The seeker for beautiful gardens must not confine his search to large places, where the flower gardening is often of a most commonplace character, and greatly in need of the bold and informal treatment recommended in these pages.

CHAPTER IV.

ON LAYING OUT GARDENS.

DESIGNING a garden is one of the supreme joys of life. The true garden lover will not dispose of it at a gulp ; he will savour it, as he would a choice wine. While common minds are disporting themselves, after the evening meal, with the political moonshine in the daily papers, or in losing winning hazards on the billiard table, the garden designer will be covering "Bristol board" with blotches, circles, and zigzags.

If he be wise enough to get the very utmost out of his fascinating recreation, he will begin his designing in the summer time, so that he may have several months of pure happiness before autumn puts an end to planning, and starts the work.

Tom Pinch called attention to the singular fact that in advertisements one man is advertising requirements and another qualifications which exactly correspond, and yet the two do not seem to come together. It is an equally remarkable thing that professional landscape



NOT AREA ALONE, . BUT GOOD TASTE" (See page 15)

THIS IS A PRETTY CORNER IN A SUBURBAN GARDEN

sweep. His side borders may be cut in a perfectly straight line, but the effect will be superior if the edge is waved. The flower beds may be rectangles, but circles, ovals, and crescents will be much prettier. A bed of Rhododendrons might be cut in a dead square, but it would be more pleasing to the eye as a bay.

Secondly, there must be an adequate foil of turf for every border or bed. Groups of colour lose half their effect if they lack a soft setting of greensward.

Thirdly, there must be irregularity of height as well as of outline. With clever planning, a flat garden may be almost as well broken up as one that possesses natural mounds and dells. A group of pillar Clematises, arches of Crimson Rambler, and other Roses, a framework meshed with Honeysuckle, low stumps clothed in *Wichuriana* or other selected Roses, groups of shrubs, hedges of Golden Privet, *Euonymus*, Sweetbrier, Tamarisk, and green or Golden Yew, with a rock-bed or two, will impart a welcome diversity.

Fourthly, an endeavour should be made to mask the walls or fences. This has the effect of disguising the area, and imparting an appearance of space and freedom.

Fifthly, due thought must be devoted to the task of providing beauty for all seasons of the year. A plan that merely provides a brilliant effect in summer is essentially faulty.

These points might be rounded off with the general appeal, so old, yet so often repeated, to lean so to Nature that Art is concealed. "In laying out a Garden," wrote Addison, in one of his incomparable essays in the *Spectator*, "we are to copy Nature as much as possible." "To conceal every appearance of Art, however expensive, making the whole appear the production of Nature only," was one of the laws laid down by Capability Brown's pupil, the famous Humphrey Repton. Let us, however, avoid the mistake made by gardeners of every school—that of concentrating attention on the plan, and forgetting the plant. There is something to be said alike for the formal terrace-and-avenue garden of Le Nôtre, the landscape of Kent, and the modern rock-garden of Robinson, but the best system of gardening is that which ignores unnatural Art as severely as artificial Nature, and, planning with grace and freedom, completes its work by making every plant grown a notable example of its kind.

He who builds wisely in our chill, cloudy clime will turn his house's face to the south. In the southern counties it need not be due south, but may have a turn to the east, so as to meet the sun full about 11 a.m.; but the main aspect must be southerly. Then the principal living rooms will be comparatively warm and healthy in the autumn, winter, and spring,

even though demanding shade in the height of summer. He will build, too, on a gentle declivity rather than on an arid and boisterous hilltop, or in a damp and relaxing bottom.

How will these considerations of building affect the garden? Well, plants, like human beings, thrive best, other things being equal, with plenty of light and warmth. So far as aspect is concerned, a southern slope is excellent for a garden. As regards soil, it may suffer in comparison with the bottom lands, the layer of mould being generally shallower; against this, however, may be set the fact that it will not catch frosts so severely. All things considered, the southern slope is what we want. If the site is so favoured as to extend to the bottom lands, and there takes in a stream, it will give us almost perfect conditions for making a beautiful garden. We shall adorn the stream sides, contrive a pretty bridge, and provide cool, shady walks for the hot summer weather.

The house may stand on a terrace spacious enough to allow a good area in front of the windows. The terrace may end in a sloping bank, but shall preferably be supported by a wall, creeper-covered. In the border at the foot of the wall shall be grown Tea Roses, Hollyhocks, Paeonies, Madonna Lilies, white Phloxes, and other beautiful plants. A broad flight of stone steps shall lead from the terrace to the

lower grounds, and the vases at the foot of the stone balustrades shall be filled with *Tropaeolums* or Ivy-leaved *Geraniums*. The walk in front of the wall borders must, of course, be paved with irregular, unjointed flagstones, and edged with Box.

In the simplicity of this plan there lies an undoubted charm. One sees it in many a sweet old garden. And the terrace walk, with its pleasant odours, comes to be a favourite promenade. None the less, it is out of harmony with modern ideas. Our garden must begin under the windows, and with the smallest possible area of gravel on which a vehicle can turn, it must fall in lawn, rockery and border to the limit.

The border under the wall need not be a wide one—three to six feet will suffice—but it must have generous cultivation. Unless the soil in this hot, dry spot be deep and well manured, the creepers planted to cover the house, as also the dwarf plants in front of them, will fail to flourish. One of the indispensables for a house wall is Veitch's Virginian Creeper, variously known as *Ampelopsis Veitchii* and *Vitis inconstans*; and this, as a nurseryman's man once remarked to the author, is "a werry good plant to die." It certainly will not live in poor, parched soil, and albeit its proneness to an early demise may be very satisfactory from the nursery-

man's point of view, who has to supply fresh plants, it is less pleasing to the planter. Roses, Clematises, and other plants such as are often grown on house fronts, equally object to starving and roasting. Give them rich, deep soil, plant them by mid-March, so that they may get established before hot weather comes, and they will thrive.

We have seen that our path or drive from the entrance is not coming up to the house in a straight line. As a matter of fact, we are not going to see much of that path, even when we are walking on it. For the greater part of its length it may have to serve for both visitors and tradesmen, but before it reaches the house it must fork, one branch going to the front and the other to the back door. Both forks shall be well screened with shrubs, and the area which they enclose shall be a level of the finest turf, relieved, perhaps, but certainly not covered, by flower beds.

In its progress to the gate the path shall gently curve away among clumps of shrubs, isolated Conifers, and bold beds of flowers. It shall be spanned at intervals by an arch. At no point shall we be able to look along it and see an unbroken stretch of gravel. On the contrary, we shall see it constantly melting into breaks of cool foliage and brilliant breadths of bloom. Remember that this plan can be

followed in a small suburban as well as in a larger country garden.

The entrance must be well screened by shrubs, of which a list shall be given in another chapter. Evergreens of the more common kinds, such as Laurels and Aucubas, are often reviled in these days, but flower gardeners whose means are limited must not despise useful and inexpensive things for plain purposes. A good deal of affected nonsense is talked about shrubs. The people who indulge in it do not, as a rule, lay down Turkey carpets in their kitchens. Plants of low growth may skirt the drive if desired. *See page 139.*

CHAPTER V.

ON THE MAKING OF LAWNS.

VISITORS from other countries frequently remark on the beautiful verdure of British lawns. Our humid climate has its part in this, but we should be doing injustice to our insular self-complacency if we did not permit ourselves to believe that a considerable portion of the success is due to rational methods of treatment.

When the making of a lawn is in view, the first question which arises is: Shall we use turves or seeds? Let us consider the *pros* and *cons* of both. Rapidity of construction is all on the side of turves. They can be laid down at any time in the autumn, winter, or early spring, when the weather is not very wet or very frosty. Less care need be taken in cleaning the ground, inasmuch as the weeds underneath will be smothered by the thick mat of turf above them. Given a firm groundwork, and vigorous beating of the turves as they are put down, a firm, even sward is certain. If cut from very light soil, however, some cracking

may follow if the succeeding summer be dry, and a little filling in and watering may be called for.

The principal drawback to the use of turves is the difficulty of getting them in sufficient quantity, and of acceptable purity. Even in the country turves are not always easy to get, and where they are procurable they are often a mixture of coarse grasses, Daisies, Buttercups, Plantains, and Dandelions. He who proposes to buy turves should carefully inspect them before he gives his order. Provided the turf is reasonably pure, coarseness of grass need not be regarded as a fatal bar, because refinement will come with mowing and rolling. Many excellent lawns have been made from meadow turves.

Turning to seed, our principal *pro* is comparative purity, provided that the seeds are purchased from a firm which has made a study of, and earned a reputation for, its lawn seeds. This is very important. Grass seeds are frequently greatly contaminated. As the many species differ very considerably in vigour, it is wise for the buyer to describe his soil to the chosen seedsman, and let the latter propose the blend.

But having taken trouble, and paid a special price, to get pure seed, it is all the more necessary to do everything that can be done to give it a chance of succeeding. This is no light task, and

brings in one of the first *cons* of the seed lawn. The ground must be drained if wet, thoroughly dug, thoroughly manured, and, above all, thoroughly cleaned. All weeds must be got out of it, and this may not be achieved at the first working. Ply fork, rake, and fingers persistently until the end is gained.

As regards manuring, three barrow-loads of well-decayed yard stuff per square rod should be dug well in. Afterwards the surface soil should be broken up, and raked smooth and fine. As much as $1\frac{1}{2}$ cwt. of seed per acre, or, say, 1 lb. per square rod ($30\frac{1}{4}$ square yards), may be sown, and it should be spread evenly on a windless day, preferably towards the end of March. Immediately afterwards scratch the soil well over it with an iron rake, and put on the roller. Birds must be kept away by netting, threads, or scares until germination has taken place.

The plants will spear through in a few days, and the lawn-maker holds his task completed. No ; it is just beginning. We have all heard of the Oxford college gardener's reply to a question about making a lawn : " You mows it and you rolls it for three hundred years." If the staggered questioner had pressed for further details, he would probably have had the time parcelled out for him in two hundred years' rolling, and one hundred years' mowing. Bring out the roller

within a fortnight of sowing, and keep it going, on and off, until it falls to pieces at the end of half a century or so, then start with another. You cannot very well over-roll a lawn, so long as you keep off it in very wet and frosty weather. Rolling spreads the root fibres, encourages a close mat, and produces springiness. It tends to refinement of grass.

Mowing should begin when the young grass is between two and three inches high. Set the cutter rather high, so that it skims off the top of the young plants without any risk of pulling them out by the roots; or, better still, use a scythe for the first two or three cuttings. Grass generally wants mowing once a week from mid-April to mid-October; some give an occasional cutting through the winter. See that no stones lie on and foul the mower.

Should patches go bare scratch them over with a rake, scatter on a little fine soil, sow seeds, and roll. Always seize any excuse for rolling.

If there are many birds about they will keep worms in check, but a light brushing over with a besom may be required at times to spread casts. Unfortunately, not all the efforts of black-bird and thrush, robin, starling, and wagtail, will prevent a mole causing eruptions now and then. With gloved hands (for the mole is keen of smell), set a steel spring trap in the principal run, and carefully cover it so that no light can penetrate.

If lawns become worn through much usage in a dry season, spread on a coating of fine soil and decayed manure in mixture during the autumn, and leave the winter rains to wash it in. Or two ounces of bone meal per square yard may be used.

Never allow weeds to spread. If a Dandelion shows itself spud it out to the last particle without delay.

One last word. It is often advised to remove the box when mowing, and let the cut grass lie where it falls, on the ground that it serves as a mulch. It does, but in turning brown it mars the soft verdure. Well made, well kept lawns will thrive without this unsightly mulching.

CHAPTER VI.

ON THE ADORNMENT OF LAWNS.

WE cannot very well think of a lawn without at the same time thinking of its surroundings. The material and the mechanism for making the lawn may be perfect, but it will not give its full effect unless its boundaries are skirted by flowers and shrubs. A flat, level expanse of grass, stretching away unbroken and unbounded, is apt to appear tame and unfinished. Give it support at the outskirts, with due regard to the sky line and the outer view, and it serves its fullest purpose.

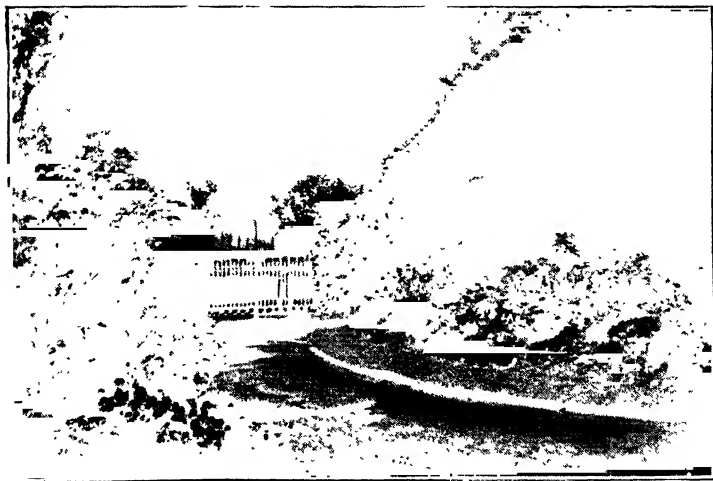
The illusion of increased area and enlarged view is strengthened by making the surface somewhat undulating. This will not suit the croquet player, but pastimes and the principles of landscape gardening cannot always be made to harmonise.

Remember that in speaking of lawns allusion is made to a real expanse of grass, not to the patches of turf which serve as a foil to flower beds, or as "verges" to walks. We want this



WORK IN CURVES (See page 18.)

AN UNDULATING BORDER UNDER A WALL



WORK IN CURVES (See page 18.)

A PRETTY ENTRANCE NOTE THE CURVING WALL



LOW STUMPS, CLOTHED IN SELECTED ROSES (See pages 19, 20, 21)

cool, refreshing base for our beds undoubtedly, but we also want a lawn proper—a stretch of turf on which family and friends can foregather. Do not cut this piece up into patchwork with beds. Rather put belts of shrubs, flower beds, or herbaceous borders, quite on the outskirts. By this plan a restful and yet beautiful effect will be produced.

With the exception of one or two breaks for ingress (which may be arched), or for the sake of a vista, the lawn may, if desired, be completely belted, but the treatment should vary. For example, one portion of the “surround” may be a bay of Rhododendrons, another a border of herbaceous plants, a third a large bed of pillar Clematises and stumps covered with Roses, a fourth a bed of Tea Roses or Carnations, a fifth a bank of shrubs. Here are a few detailed suggestions :—

A RHODODENDRON BAY.

The best soil for Rhododendrons is either peat or fibrous loam. Limestone and chalk are fatal. The soil should be cultivated at least 2 feet deep. April is the best month for planting. The plants may be put in fairly close to give immediate effect, but thinning should be done before they overcrowd each other. Old plants going bare at the base may be cut hard back into the old wood after flowering. Fading flower

BEDS OF TEA AND HYBRID TEA ROSES.

A bed of well-chosen Roses is a beautiful ornament of a lawn. In spring the young foliage is delicious in its tints, and from May to November there is always a sprinkling of flowers. The Teas and Hybrid Teas are far superior to the Hybrid Perpetuals for continuous effect. Here are a few vigorous, free-blooming varieties :—

Anna Olivier, white or tinted.	Kaiserin Augusta Victoria,
Augustine Guinoisseau, blush.	pale yellow.
Caroline Testout, pink.	Liberty, crimson.
Dr. Grill, copper.	La France, peach.
Francisca Krüger, copper.	Madame Abel Chateney, rose.
François Dubrueil, crimson.	Marie Van Houtte, lemon,
Grace Darling, cream.	tinted rose.
Grüss an Teplitz, crimson.	Marquise de Salisbury, crim-
Gustave Regis, yellow.	son.
Hon. Edith Gifford, white.	Mrs. W. J. Grant, pink

The Rose beds may be margined with such beautiful Pinks as Ernest Ladhams, blush ; Her Majesty, white ; and Mrs. Sinkins, white, if desired.

A BED OF CARNATIONS.

So exquisitely beautiful is a good bed of Carnations, with its silvery leafage and glorious blooms, that an effort must be made to include one. Let the ground be thoroughly prepared in winter, sturdy plants put out 15 inches apart in March, and success is almost certain to follow.

Staking will be required as the flower stems spindle up. Coil stakes, which circle and support the stem without tightly clasping it, are the best. Select varieties are given in the special chapter on Carnations.

TREES AND SHRUBS.

Our lawn must have marginal tree and shrub beauty, both of leaf and bloom. We want shade, we want shelter, we want imposing effect, we want irregularity of outline: all these things trees and shrubs give us. A few well-placed, naturally grown shade trees are a great embellishment to any place. By making a careful choice of the material which is available we can get beauty nearly all the year. We can have gold, silver, and variegated leafage in both trees and shrubs; we can have ornamental green foliage; we can have evergreens; and we can have floral charm and perfume, as a later chapter will teach us. Here, then, are a few ideas for lawn treatment which will give beautiful and uncommon effects.

CHAPTER VII.

ON HERBACEOUS BORDERS.

LET us clear the way by wrestling with the word "herbaceous," which we all use glibly nowadays, but do not understand, just as we talk of mechanical motor valves and turbine engines without knowing what they really are.

Herbaceous is the adjectival form of herb, and a herb is a plant the stems of which die every year, as distinguished from a shrub, which retains its stems (and also its leaves if an evergreen) throughout the winter. Some word-jugglers try to drag common annuals such as *Clarkias* into the list of herbaceous plants. But a *Clarkia* does not die to the roots every year in this sense. It dies outright—root as well as stem. You cannot speak of a plant dying down every year when it has only one year of life. Plants of its species may die every year, but not one individual plant. It would need the nine lives of a cat to do that.

Herbaceous—stem losing ; shrubby—stem retaining. Here we have a clear distinction. In the name of common sense let us adhere



From a photo by Mr. A. C. Long.

SPANNED AT INTERVALS BY AN ARCH" (See page 23)



MELTING INTO BREAKS OF COOL FOLIAGE AND BRILLIANT BREADTHS OF BLOOM. (See page 13)

A FLOWER BORDERED PATH AT COOYBE LEWIS

to it. Both herbaceous and shrubby plants have perennial rootstocks, which live few or many years, according to circumstances.

Herbaceous borders will be low in the winter. The leaves and flower stems will die away in autumn, but the roots and underground crowns or buds, though dormant, will remain alive, and will throw up fresh stems in the spring.

In modern flower-gardening the herbaceous border plays the part which beds of zonal Pelargoniums, and "ribbon borders" of yellow Calceolarias, blue Lobelias, and scarlet "Geraniums" played half a century ago. The herbaceous border is the mainstay of the garden. With the great variety of plants which it accommodates, its immense range of colours, its long period of beauty, its diversity of height and form, its generous production of material for house decoration, it possesses a powerful claim on our regard.

Not the least of the attractions of the herbaceous border is the scope which it affords for beautiful combinations of flowers. Like the artist with his palette and pigments, we can devise pictures, disposing our plants as he disposes his figures, so as to secure rich and harmonious effects. It is this which appeals so strongly to cultured minds.

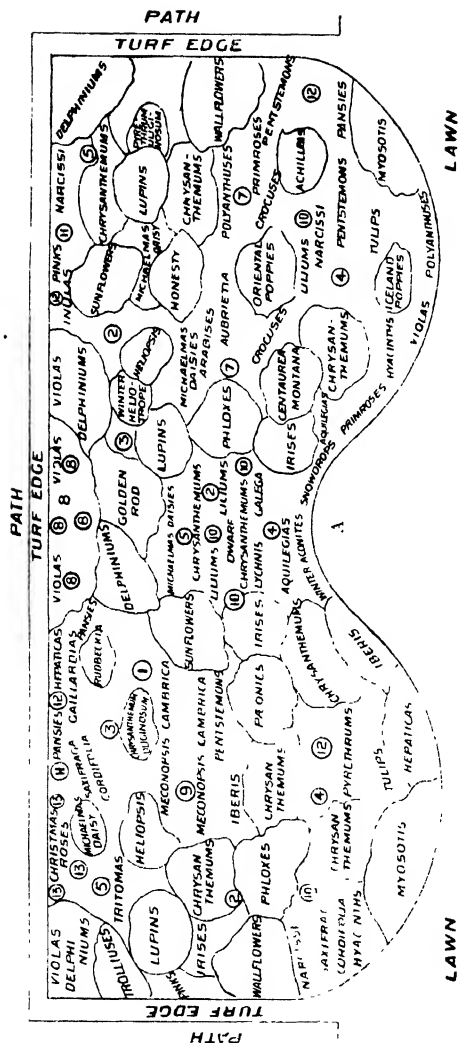
Of all classes of flowers herbaceous plants respond the best to cultivation, and the idea that they need no treatment is a pernicious one.

People apparently think that coarse vegetables need rich manure, but that herbaceous plants will "grow themselves." For the author's part, he works on opposite lines. His palate has no taste for Celery and Lettuces gorged with dung, but his eye rejoices in the noble proportions which his herbaceous plants assume when the stuff that is saved from the kitchen garden is dug deeply into the flower borders. Manure for herbaceous plants! Aye! Manure of the richest and best, and double digging to boot, in order to deepen the rooting area.

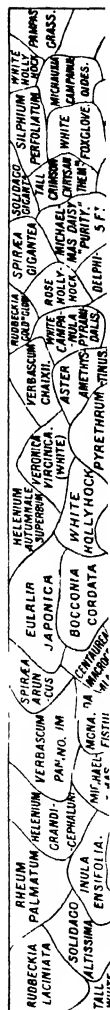
Yet another thing he demands—one more great item in the routine of cultivation. This is frequent lifting and division. Old, extended root-stocks have weak central crowns, which dwindle to nothing in the impoverished soil. Divide the stocks, throw the centres away, plant the strong-crowned outer portions in enriched soil, and lo! strength follows weakness, beauty barrenness.

Pleasure and interest unspeakable lie in designing herbaceous borders. We set ourselves a task of many parts. We want:—

- (1) Fulness without overcrowding.
- (2) A continuous display month by month.
- (3) Abundance of flowers for cutting.
- (4) Beautiful colour harmonies.
- (5) Borders beautiful in parts, and also as a whole.



Circles 1 to 13 may be pillars, stumps, or Sweet Pea clumps.



While the biggest and tallest plants must go to the back, and the smallest and dwarfiest in front, there must be no attempt at regular tiers, so that the mass rises by fixed stages from front to back. That is apt to look stiff. Some fairly tall plants should be grouped near the front, yet not so that they obscure a beautiful dwarfing. Guard, too, against putting plants of a similar fixed flowering season in one block. Rather strive to spread over the border a nucleus of good plants which bloom successionally, or which are in flower a very long period.

Study the association of plants which form a good foil one with another. Few builders of borders have regard to the manner in which contiguous plants will harmonise. Thus colours which kill each other find themselves together, and a few yards away are flowers that would blend with each. The plans that are given in the illustrated insets will prove useful as a guide to arrangement.

A knowledge, not only of the best plants, but of the dimensions to which they attain in fertile soil, and of their flowering periods, is essential to the proper planting of a herbaceous border. Without the former, errors in the distance of planting might lead to either bareness or crowding. Without the latter, we might have a block of colour in one part of the border at a particular season, and no flowers at all in another. In the

lists of plants presently to be given, information on both points will be provided, as well as on the colour of the flowers.

Now, let us ask ourselves the question where we can best establish beautiful groups of herbaceous plants.

(1) *As borders to shrubberies.* The old style of shrubbery was a dense bank of evergreens, frequently of the most common kinds. Such a mass may have value as a wind break, screen, or stop gap, but it will have no artistic importance, nor will it give any intellectual pleasure. It will be as useful, and as wanting in interest, as a Thorn hedge. Front the shrubbery, however, with a broad belt of good herbaceous plants, and for six or seven months out of the twelve it will be interesting. A mere "skirting" half a yard wide is useless; the belt should be 4 to 6 feet wide.

(2) *As house or other wall borders.* Ugly buildings or bare walls could be hidden for the greater part of the year with herbaceous plants. Here again a narrow fringe of plants is of very little value; breadth is essential. Special care must be taken in preparing the soil, as such sites are often dry and impoverished.

(3) *As lawn beds.* We speak of herbaceous borders, generally. Well, a "border," as generally understood, is only the front portion of a certain area of garden ground. But there is no

reason why a whole slice of garden should not be given up to beds of herbaceous plants. A group of such beds, with grass paths between, and with Rose-clad arches at different points, makes a beautiful garden in itself. Do not skimp space for the beds. Give them every inch there is available. A bed from 12 to 20 feet across will afford room for some bold and brilliant effects.

(4) *In small gardens.* In a quite small garden the herbaceous plants will probably serve the best purpose in a border round the outskirts. The fences should be masked with evergreen trees and shrubs, so that they may not be revealed in naked ugliness when the herbaceous plants sink to their winter rest. The latter may form a broad belt in front of them. Carry the border round in a series of bays and promontories.

(5) *As kitchen garden borders in large places.* Great gardens are steadily adopting the use of herbaceous borders in the vegetable department. Large kitchen gardens are generally walled, and intersected by gravelled paths, approaching the width of carriage drives. Time was when these splendid walks were skirted by nothing more attractive than lines of espalier fruit trees; now the tendency is to fringe them with broad belts of herbaceous plants, and the espaliers, if provided at all, are set farther back. One sees this system in such noble gardens as

those of his Majesty the King at Sandringham ; those of the Earl of Haddington at Tynninghame ; those of Lord Battersea at Overstrand, and many others.

(6) *Dwarf hardy plant borderings.* An interesting and charming plan is that of having a narrow waved bordering of pretty dwarf rock Alpines amongst small stones along the side of paths. Lord Battersea adopts this system in his lovely garden near Cromer. It robs the walks of all stiffness.

A large volume could be filled solely with notes on hardy herbaceous plants; but the average flower lover might prefer to see some of the most valuable kinds classified for his guidance. Those named herewith are tabulated according to their flowering season. The letters *d*, *m*, and *t* indicate respectively dwarf (up to 18 inches high), medium (18 to 36 inches), and tall growers (upwards of 3 feet) respectively. It is necessary, however, to point out, with a view to muzzling the over-eager critic, that heights vary according to soil, situation, and treatment ; that flowers sometimes extend over more than one season : and that a few kinds which are not strictly herbaceous are included :—

WINTER BLOOMERS.

Aconite, Winter. *See* bulbous flowers.

Anemone Apennina	}	<i>See</i> special chapter.
„ blanda		

Arabis, white, *d.*

Aubrietia, blue, violet, or rose, *d.*

Chionodoxas } *See* chapter on bulbous flowers.
Crocuses }

Daffodils. *See* special chapter.

Forget-me-nots, blue, *d.*

Fritillaria. *See* bulbous flowers.

Helleborus niger (Christmas Rose), white, *d.*

Hepaticas, blue, pink, and white, *d.*

Irises. *See* special chapter.

Orobis vernus, purple, *d.*

Primroses and *Polyanthuses*, various colours, *d.*

Sanguinaria Canadensis (Blood Root), white, *d.*

Scillas (Squills). *See* bulbous flowers.

Violets, blue and white, *d.*

SPRING BLOOMERS.

Adonis vernalis, yellow, *d.*

Alyssum saxatile compactum, yellow, *d.*

Anemones. *See* special chapter.

Antirrhinums (Snapdragons), various colours, *d.*

Aquilegias (Columbines), various colours, *d.*

Arabis, white, *d.*

Arnebia echioides (Prophet Flower), yellow, dark spots, *d.*

Aubrietias, blue, violet, rose, *d.*

Bellis perennis flore pleno (double Daisy), white, red, *d.*

Corydalis nobilis, yellow, *d.*

Daffodils. *See* special chapter.

Dielytra spectabilis, pink, *m.*

Doronicums (Leopard's Bane), particularly *plantagineum*
excelsum (Harpur Crewe), yellow, *d* to *m.*

Epimedium Alpinum, crimson and yellow, *d.*

Geum montanum, yellow, *d.*

Iberis (Perennial Candytuft) *corifolia*, white, *d.*

„ *sempervirens*, white, *d.*

Irises. *See* special chapter.

Lily of the Valley, white, *d.*

Lithospermum prostratum, blue, *d.*

Paeonies. *See* special chapter.

Phloxes. *See* special chapter.

Primroses and Polyanthus, various colours, *d.*

Pyrethrums. *See* summer bloomers.

Ranunculus aconitifolius flore pleno (Fair Maids of France),
white, *d.*

„ amplexicaulis, white, *d.*

Saponaria ocymoides, pink, *d.*

Saxifrages (Rockfoils), various colours, *d.* *See* rock plants.

Scilla campanulata, blue, *d.*

Tiarella cordifolia (Foam Flower), white, *d.*

Trillium grandiflorum, white, *d.*

Trolliuses (Globe Flowers), yellow, *d.* to *m.*

Tulips. *See* special chapter.

Veronica prostrata, blue, *d.*

Violas. *See* special chapter.

SUMMER BLOOMERS.

Achillea Millefolium rubra (Milfoil), red, *m.*

„ Ptarmica The Pearl, white, *m.*

Aconitum Fischeri, purplish blue, *t.*

„ Napellus (Monk's Hood), blue, *t.*

Alströmeria aurantiaca, orange, *t.*

„ pelegrina, yellow striped rose, *m.*, not quite hardy.

Anchusa Italica, blue, *t.*

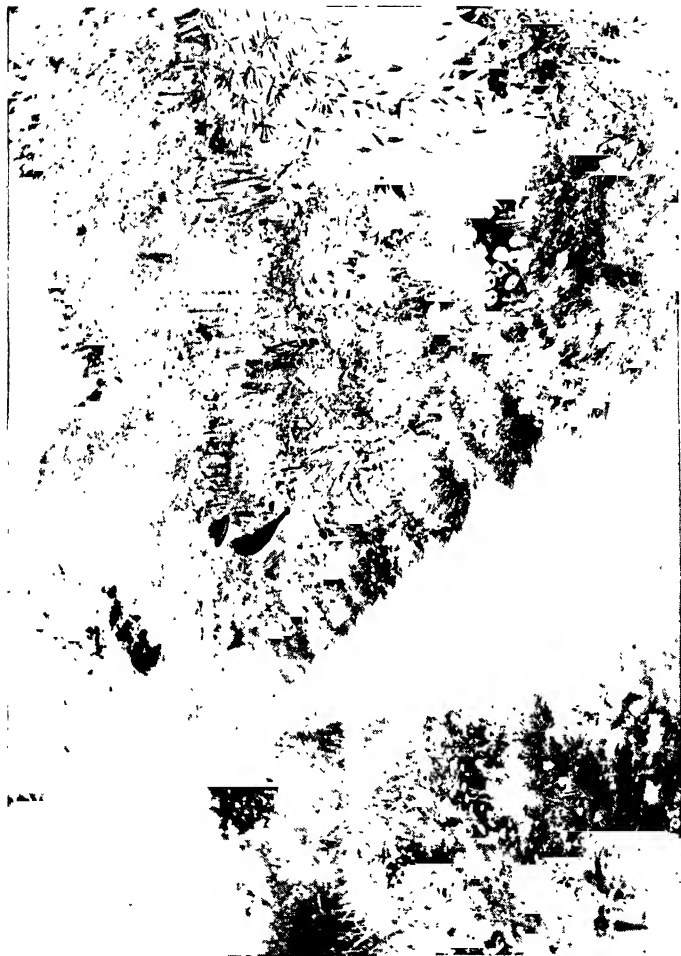
Anemones. *See* special chapter.

Anthemis tinctoria, yellow, *m.* There are several good varieties of this useful plant, of which Kelwayi and Canary Bird may be named.

Anthericum Liliago (St. Bernard's Lily), white, *m.*

„ Liliastrum (St. Bruno's Lily), white, *m.*

Asclepias tuberosa, orange, *m.*



"SCOPE FOR BEAUTIFUL COMBINATIONS OF FLOWERS (S. July 37)



SCOPE FOR BEAUTIFUL COMBINATIONS OF FLOWERS. (See page 57.)

- Aster, perennial. *See* special chapter.
- Astrantia major, striped, *m.*
- Bocconia cordata, buff, handsome foliage, *t.*
- Buphthalmum salicifolium, yellow, *m.*
- Campanula Carpatica, blue, *d.*
- „ „ alba, white, *d.*
- „ Garganica, blue, *d.*
- „ glomerata alba, white, *m.*
- „ „ Dahurica, blue, *m.*
- „ latifolia, blue, *m.*
- „ „ alba, white, *m.*
- „ Medium (Canterbury Bells), blue, rose and white, *m.*, also duplex (Calycanthemum), *m.* These should be treated as biennials.
- „ persicifolia (Peach-leaved), blue, *m.*
- „ „ alba flore pleno, double white, *d.* to *m.*
- „ Portenschlagiana, blue, *d.*
- Centaurea macrocephala, yellow, *t.*
- „ montana, blue, *m.*
- Chrysanthemum maximum, white, *m.*
- „ „ King Edward VII., white, *m.*
- „ „ Princess Henry, white, *m.*
- „ florists' varieties. *See* special chapter.
- Cimicifuga cordifolia, white, *m.*
- Coreopsis grandiflora, yellow, *m.*
- „ lanceolata, yellow, *m.*
- Delphinium (Perennial Larkspur) nudicaule, orange, *m.*
- „ The following is a selection of florists' varieties, mostly blue, of various shades, tall, and of great value :—
- | | |
|---------------------|--------------------|
| Beauty of Langport. | Persimmon. |
| Belladonna. | Portia. |
| Bleu Celeste. | Princess of Wales. |
| Captain Holford. | Salamander. |
| Dorothy Kelway. | Spinoza. |
| John Bright. | The Queen. |

Hollyhocks. The old species are a negligible quantity so far as the garden is concerned, and named florists' varieties should be chosen. At the same time, in view of the danger of disease, seedlings from a good strain may be tried in some years. Of course, this will not keep named varieties true. To secure that end, cuttings, eyes, or grafts must be used. A few sprayings with sulphide of potassium, at the rate of 1 oz. per 3 galls. of water, may be tried to check disease. The following are good varieties :—

Conquest, dark crimson.	Mrs. Edwards, salmon.
Joshua Clark, carmine.	Queen of Whites, white.
Miss Ashley, rose.	Queen of Yellows, yellow.

Inula glandulosa, brownish yellow, *m*.

Irises. See special chapter.

Kniphofia (*Tritoma*, Red-hot Poker, Flame Flower).

„ *aloides* (*Uvaria*), red and yellow, *t*. There are several handsome named varieties and hybrids, such as *Saundersii*, *Obelisque*, *Pfitzeri*, and *Star of Baden-Baden*.

„ *corallina*, scarlet, *m*.

„ „ *superba*, scarlet, *m*.

„ *Leichtlinii*, red and yellow, *t*.

„ *Macowanii*, coral red, *m*.

Lathyrus *grandiflorus*, crimson and rose, rambling.

„ *latifolius* (*sylvestris platyphyllus*, Everlasting Pea), rose, rambling.

„ *latifolius albus*, white.

„ *nervosus* (*Magellanicus*, Lord Anson's Pea), pur-

Lobelia *cardinalis*, scarlet, *m*. [plish blue, *m*.

„ „ *Crimson Beauty*, crimson, *m*.

„ *fulgens*, scarlet, *m*. The following are good varieties :—

Heavenly Blue, blue.	Queen Victoria, vermilion.
Lord Ardilaun, crimson.	Snowflake, white.

„ *syphilitica*, blue, *m* to *t*.

- Lupinus polyphyllus, blue, *m* to *t*.
 „ „ albus, white, *m* to *t*.
 Lychnis Chalcedonica flore pleno, scarlet, *m*.
 „ Viscaria splendens flore pleno, rose, *d*.
 Malva moschata alba (White Musk Mallow), *t*.
 Meconopsis (Poppy) Nepalensis, yellow, *t*.
 „ Wallichii, blue, *t*.
 Mimulus (Monkey Flowers) cardinalis, scarlet, *d*.
 „ cupreus, orange, *d*.
 There are several hybrids and varieties. marbled with brown or purple. All are good shade plants.
 Monarda didyma (Bergamot), red. sweet, *m*.
 Morina longifolia, purple, *m*.
 Oenothera (Evening Primrose) biennis, yellow, *t*.
 „ biennis grandiflora or Lamarckiana, yellow, *t*.
 „ fruticosa, yellow, *m*.
 „ „ Youngii, yellow, *m*.
 Paeonies. See special chapter.
 Papaver (Poppy) nudicaule, yellow. also orange and white forms, *d*.
 „ Orientale, orange, *m*. There are now many fine named varieties of this plant. Bracteatum is a popular variety of it.
 „ pilosum, orange, *m*.
 „ rupifragum, orange, *m*.
 Pentstemon azureus, blue, *d*.
 „ glaber, purple, *d*.
 While the species of Pentstemon are good plants, public attention is largely concentrated on the florists' varieties, which may be raised from seed or cuttings, preferably the latter to keep them true.
 Phlox. See special chapter.
 Physalis Franchetti, orange, *m*.
 Platycodon grandiflorum Mariesii, blue, *d*.
 Polygonum (Knotweed) affine (Brunonis), rose, *d*.

Polygonum Baldschuanicum, white, climber.

„ *vaccinifolium*, rose, rambler.

Potentilla (Cinquefoil). The hybrids are best, and the following may be chosen :—

Chameleon, scarlet, yellow stripes.

Drap d'Or, orange.

Louis van Houtte, crimson.

purpurea plena, crimson and yellow.

versicolor, red and yellow.

Victor Lemoine, red, striped yellow.

Prunella grandiflora, purple, *d.*

„ „ *alba*, white, *d.*

Pyrethrum Parthenium, white, *m.*

„ *uliginosum* (*Chrysanthemum uliginosum*), white, *t.*

The florists' *Pyrethrums* are extremely valuable, owing to their early and profuse flowering, and bright colours. The following are good :—

Singles.

Agnes Mary Kelway, rose.

Apollyon, pink.

Decoy, scarlet.

Feversham, white.

Ornament, violet.

Yellowstone, lemon.

Doubles.

Aphrodite, white.

Melton, crimson.

Othello, violet.

Ovid, dark rose.

Pericles, yellow.

Princess Beatrice, pink.

Rudbeckia (Cone Flower) *laciniata*, yellow, green cone, *m.* to *t.*

„ *laciniata* (Golden Glow), double yellow, *m.*

„ *speciosa* (Newmanni), yellow, cone purple.

Scabiosa (Scabious) *Caucasica*, blue, *d.*

„ *Caucasica alba*, white, *d.*

Senecio pulcher, purple, *m.*

Sidalcea candida, white, *m.*

„ *malvaeflora*, lilac, *m.*

Solidago virgaurea (Golden Rod), yellow, *t.*

Spiræa (Meadow Sweet) *Aruncus*, white, *t.*

„ *astilboides*, white, *m.*

„ *Filipendula flore pleno*, double white, *m.*

„ *palmata*, crimson, *m.*

- Statice incana nana*, pink, *d.*
 „ *latifolia*, blue, *d.*
Stenactis speciosa, blue, *m.*
Thalictrum (Meadow Rue) *aquilegifolium*, purple, *m.*
 „ *minus* (*adiantifolium*), yellow, *d.*
Verbascum (Mullein) *Chaixii*, yellow, *t.*
 „ *Olympicum*, yellow, *t.*
Veronica corymbosa, blue, *d.*
 „ *gentianoides*, blue, *d.*
 „ „ *alba*, white, *d.*
 „ „ *variegata*, variegated leaves, *d.*
 „ *longifolia subsessilis*, blue, *m.*
 „ *spicata*, blue, *d.*
Violas. See special chapter.

AUTUMN BLOOMERS.

- Anemone Japonica.* See special chapter.
Asters (Michaelmas Daisies). See special chapter.
Boltonia asteroides, pale pink or lilac, *t.*
Chrysanthemums. See special chapter.
Dahlias. See special chapter.
Sedum spectabile, rose, *d.*
Tricyrtis hirta, white, spotted purple, *m.*

The foregoing particulars will enable the planter to procure and arrange good material for his herbaceous borders.

PLANTS FOR SHADE.

The tree-shaded garden, so pleasant with its cool walks in summer, is apt to be somewhat trying to the flower-lover. There are not a great many flowering plants of the first rank which thrive quite under trees, but the following do not object to moderate shade :—

Aconite, Winter.	Hypericums (St. John's Worts).
Anemones.	Lilies of the Valley.
Aquilegias.	Mimuluses.
Asclepias.	Omphalodes verna.
Corydalis.	Pansies.
Cyclamens.	Primroses and Polyanthuses.
Daffodils.	Primulas Japonica and rosea.
Dielytra.	Sanguinaria Canadensis.
Digitalis (Foxgloves).	Saxifragas.
Dodecatheons (American Cowslips).	Scillas.
Doronicums (Leopard's Banes).	Sedum spectabile.
Epilobiums (Willow Herbs).	Snowdrops.
Evening Primroses (Oenotheras).	Spiraeas.
Forget-me-nots.	Thalictrums.
Fritillarias (Snake's Head Lilies).	Tiarella cordifolia.
Funkias.	Trillium grandiflorum.
Geranium Pratense flore pleno.	Trolliuses.
Geums.	Tulips.
Heucheras.	Veronicas.
	Vincas (Periwinkles).
	Violas and Violets.

PLANTS FOR HOT PLACES.

Alströmerias.	Lithospermum prostratum.
Antirrhinums (Snapdragons).	Lychnises.
Arabises.	Petunias (annuals).
Arnebia echioides (Prophet Flower).	Portulacas (annuals).
Aubrietias.	Saxifragas.
Belladonna Lilies.	Sedums.
Calochorti.	Sempervivums.
Helianthemums (Sun Roses).	Tigridias.
Iris.	Tropaeolums (annuals).



· FRONT THE SHRUBBERY WITH A BROAD BELT OF HERBACEOUS PLANTS " (N. 2. 1000. 40)



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REPORTED WITH FORTIFY OF HERBACIO IN PLANT - 5 10 10 10

CHAPTER VIII.

ON ROCK GARDENING.

THERE is no phase of flower gardening which is fuller of interest, or which makes a stronger appeal to the finest feelings, than rock gardening.

In the building up of rock work there is scope for the liveliest imagination, the most exquisite art. It is valuable mental training, for the constructive faculties are called upon, sharpened, and polished.

Nature, which generally grows bad plants, certainly builds good rockwork. The Briton need not leave his own shores to learn her capabilities. On the coast of Cornwall he will find constructions that are at once extraordinary and beautiful. It is true that on those iron rocks the accumulation of *débris* to serve as soil is too slight to support a varied and luxuriant Flora ; nevertheless, the flower lover may find some charming pictures, while he will discover feats in the poise of stone that might well fill the boldest imagination with wonder.

It is a somewhat remarkable fact that those students of human nature who trace in individuals

an association of ideas from childhood to maturity and old age have not hitherto discovered in rock gardening a natural development of toy building. Just as the infant loves to build houses and castles with toy blocks, so the adult likes to pile up stones in his garden. If a somewhat startling, this is, nevertheless, an eminently natural explanation of the immense popularity of rock gardening. Are we not all merely grown-up children? Is there one of us who does not exhibit some of the traits and characteristics at forty that were visible in us at four?

If, however, the impulse that bids us gather stones and build them into habitations for our plants is no more and no less than an eddy of juvenility, the experience of intervening years should have taught us at least something. At the outset, our conception of the garden that we are going to construct may be almost as crude as the idea that we formed, in early days, of the block mansion; but we do know that merely putting one stone on the top of another will not suffice. We have another advantage over our early selves. We know that if our own feeble and clumsy fingers, our own imperfectly trained minds, are incapable of giving us the success that we seek, we can learn valuable lessons by studying the work of others.

However modest, or however ambitious, the projects of the rock gardener may be, he will be

wise to take note of the work of experienced and successful men. He may see something defective. He may discover over-elaboration. But he will none the less acquire valuable hints for the guidance of his own handiwork. Nowadays there is no dearth of such examples. In almost every district there are either public parks or large private gardens, in which examples of rock gardening can be found. Alike in their good and their bad qualities, these will be instructive. It is not to be assumed that the intelligent flower-lover will go merely as a copyist. He will not take an exact drawing of what he sees, and proceed to reproduce it. The chances are that if he started out with any such idea he would find himself compelled to abandon it, owing to differences in circumstances. No ; he will go to learn the principles on which the rock gardens are made. To a certain extent he will imitate, but he may even also amend.

We began by alluding to the interest, the appeal, of rock gardening. Let us, however, emphasise the fact that these charms only exercise their fullest sway when the flower, and not the stone, is paramount. There are persons whose minds are debauched by stones. They riot in an orgy of rocks. One may see numerous examples, in both public and private gardens, where there is a miniature Gurnard's Head, and scarce a blossom to its name ! Piles of bare

stone are striking enough when poised with all the grace and power that Nature knew so well how to employ when she built to baffle the stormy waters where Channel and Atlantic meet. But in a garden! Better the stiffest terrace garden than these monstrosities. It at least has harmony with its surroundings. It is not a mass of incongruities.

The plant first—always the plant first. We must press for this, insist upon it, reiterate it. Unless a strong line is taken and maintained, the rock faddists will continue their career until they bring rock gardening into unmerited disfavour. The stones we use we must look upon as receptacles, not as statues. A true plant-lover would no more glorify a lump of rock into a garden ornament than he would a 6-inch flower pot.

It has been objected by some few of those who have had opportunities of seeing the practical expression in the author's own garden of those ideas of bold flower-gardening which are given in the chapter on herbaceous borders, that, while undeniably effective, they are less suitable than rock gardening for very small places. In demurring to the suggestion that good herbaceous gardening is not within the compass of owners of small gardens, he nevertheless readily admits the important fact that the planting area of a small place can be materially

increased by practising rock gardening. By building up mounds, the planting of a given portion of the garden can be doubled. He will go farther, and concede that if less art is called for in grouping and blending colours, there is still abundant scope for taste and fancy in associating plant with stone. A well planted rockery is no less a work of art than a well-designed border. We admire a little sea picture by Mr. Tuke as much as we do the flamboyant portraits of Mr. Sargent.

To many people herbaceous and rock gardening are one and the same. Quite commonly they are spoken of as though they were identical in their essential features. The truth is that they are entirely dissimilar. Certainly one can put herbaceous plants on a rockery, and what are generally recognised as rock plants in a border, but that does not bring the two systems together. For all practical purposes there is nearly as much difference between herbaceous and rock gardening as between either and the bedding system.

It is important to recognise that, except in special cases, good rock gardening is far more costly than good herbaceous gardening. There are few districts in which suitable stone can be procured locally. Kentish Rag, or any other soft stone, crumbles quickly, and is—at least in damp districts—not suitable, in spite of high authority for its use. Hard limestone and sand-

stone are best, and it is when they have to be purchased and transported from a distance that the cost of rock gardening begins to show itself. Wealthy flower-lovers frequently purchase hard stone from Derbyshire.

The second item of expense is soil. As already stated, the ordinary soil of most gardens can be so improved by double digging and manuring as to grow the majority of herbaceous plants luxuriantly, just as it will Peas and Onions. Strong clay, for example, gives splendid results. But experienced men would hesitate to rely on manured clay for rock plants. The very best fibrous loam is advisable for the staple. The "undercut" off a loamy meadow—that is, the rich layer from above which turf has been pared—is almost the ideal thing. It is no use attempting good rock gardening with poor soil—better leave it alone, and grow Nasturtiums.

These difficulties are not raised lightly. The author has himself had to face them. It is wise to take a sane and accurate view when contemplating rock gardening, just as it is when looking through the Stock Exchange list with a view to investing money. In no circumstances should the flower-lover yield to the temptation of investing in clinkers, burrs, or any hashed-up ugliness. Would he drink doctored claret if he could not get good Burgundy? Let us have real stones—or Nasturtiums!

Whether the cost in plants is considerable or moderate depends in a great measure on the standing which the flower-lover intends to assume. If his point of view is that he wants a rockery well furnished with good plants, and nothing more, the outlay need not be excessive, although even in this case it will exceed that of bedding plants. Home propagation will increase the stock. Suppose, however, that he enrols himself with—or, which comes to the same thing, insensibly glides into the ranks of—those whose happiness in life depends upon their securing every new form which appears, a dip into capital becomes transformed into an annual drain upon income. There is no gainsaying that a formidable prospect is opening up for hardy flower-lovers. Numbers of standard hardy plants are being elevated (or depressed) to the ranks of florist's flowers. That is to say, lists of variations, engagingly named, and alluringly described, are being tacked on to them. Immediately a coterie of specialists is formed, prepared to pay the price of every "novelty" which appears, there will be an annual flow of these fresh varieties, just as there is in the case of Dahlias, Roses, Sweet Peas, and Chrysanthemums. It is possible that they will please because of their inherent beauty and freshness, but it is quite certain that the primary reason prompting their purchase will be desire to possess what less wealthy people cannot afford.

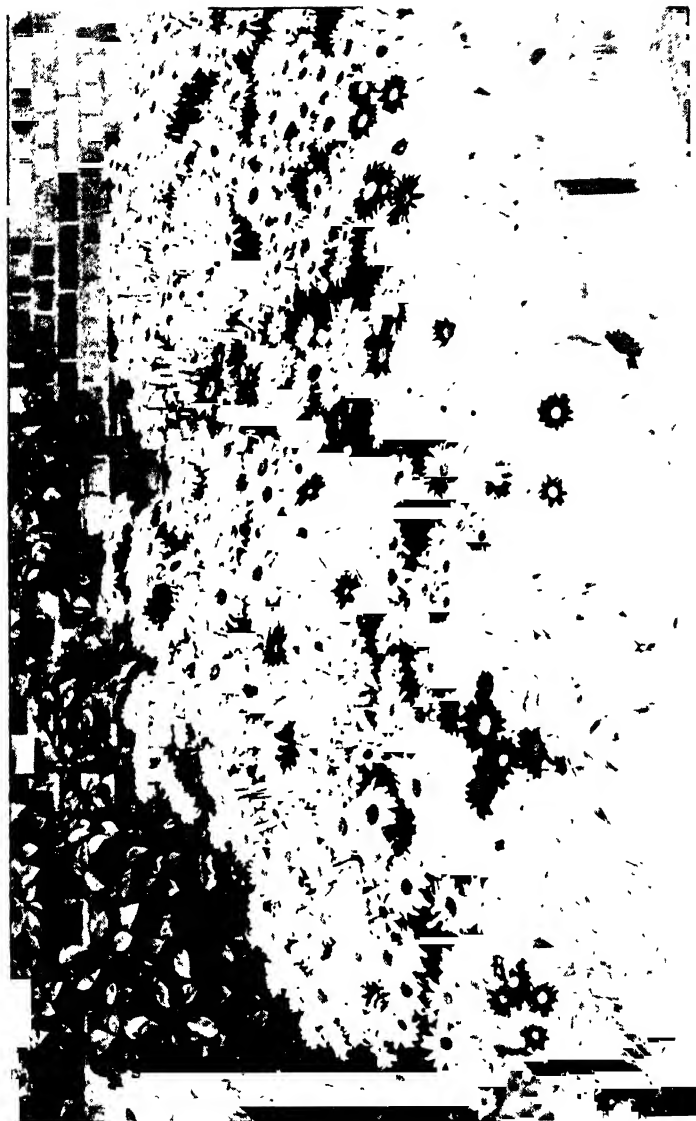
Specialising in hardy plants is not rock gardening in the purer, the better sense. Let those whose minds know no higher impulse than an ignoble longing to be better off than their fellows practise it if they will; the majority will think of garden beauty first and always.

Good plants, good soil, good stones, are our rock garden trinity. A great deal might be said about stone arrangement, such as the necessity for placing the rocks thinly, in a way to form large and deep pockets, and to guide moisture in rather than to drain it out. But when once the point has been grasped that the plant, and not the stone, is the first consideration, the necessity for labouring these points is past. The wise flower-lover will not dump down stones, and then pepper soil into them; he will first make his mound, and then firmly fix the rock. "Never," said the late Rev. C. Wolley-Dod, "put a stone in a position where it will not support your heaviest labourer." Let the larger part of each stone be in the soil, and it follows that the pockets will be comparatively narrow at the bottom, and comparatively wide at the top, which is just how they ought to be.

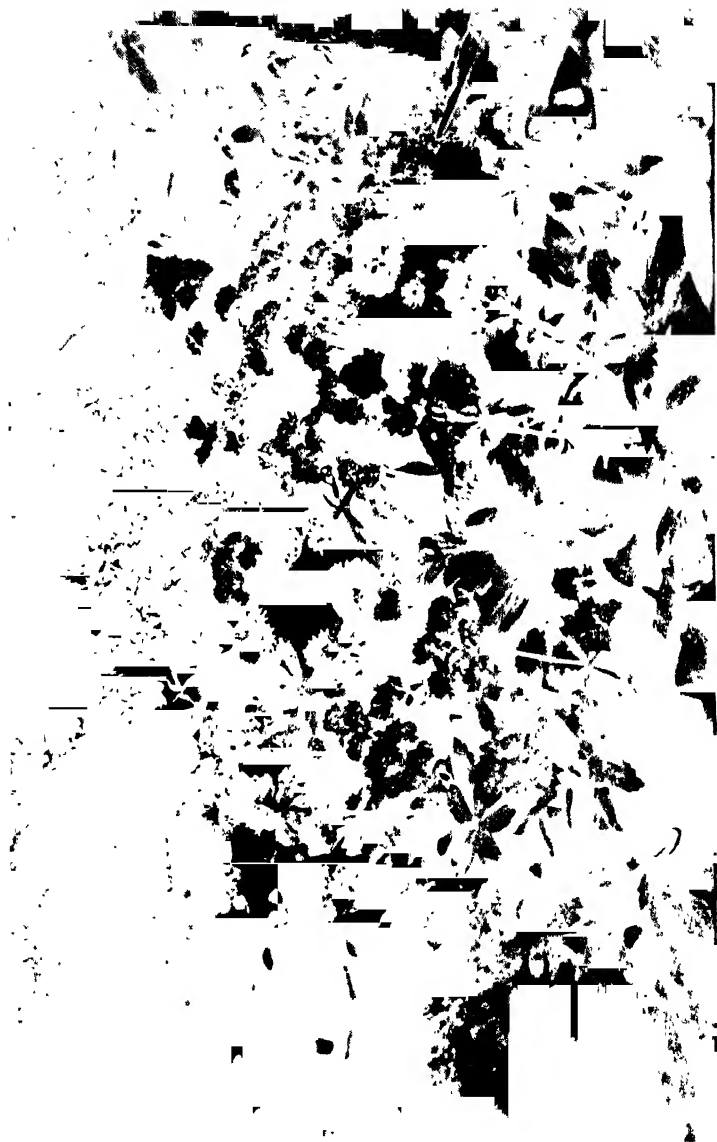
Finally, never build a rockery in shade.

The following notes on a selection of the best rock plants may be interesting:—

Acaena microphylla.—A tiny evergreen, flowers green with red spines, summer.



CHRYSANTHEMUM MAXIMUM PRINCESS HENRY. (See page 45.)



ASTRANTIA MAJOR (St. Margr. 45)

Acantholimon glumaceum (Prickly Thrift).—Rosy flowers in summer, likes a sandy compost.

Achilleas (Milfoils).—The two species *Clavennae*, white, spring and summer, leaves hoary ; and *tomentosa*, yellow, summer, leaves downy ; are good.

Aethionema grandiflorum.—Rosy flowers in summer, grows 15 to 18 in. high, likes a sandy soil.

Alyssum.—*Saxatile compactum*, yellow, spring ; and *variegatum*, with variegated leaves, are inexpensive and useful plants. *Compactum* can be raised in quantity from seed. *Montanum*, yellow, spring ; and *Olympicum*, yellow, summer, are less known.

Androsaces.—Beautiful little flowers. *Carnea*, rose, July ; *Chamæjasme*, pink, spring ; *lanuginosa*, rose, summer ; and *villosa*, rose, spring, are all gems. Bits of limestone should be stuck amongst the plants.

Anemones.—See special chapter.

Antennarias.—*Tomentosa*, with leaves covered with silvery down, is a well-known carpeter. *Dioica*, pink, early summer, is not so well known, but is very pretty.

Aquilegias (Columbines).—Favourites alike for borders and rockwork. *Alpina*, blue, white centre ; *caerulea*, blue, and the various hybrids of it ; *glandulosa*, blue, tipped white ; *Pyrenaica*, lilac ; and *Stuarti*, blue and white, are amongst the best of these charming flowers.

Arabis (Rock Cress).—There is little between *Alpina* and *albida* ; both are cheap white carpeters, flowering in spring. The double form is quite distinct, and a valuable plant. *Lucida*, white, and its variegated variety are also good Arabises.

Arenaria Balearica (Sandwort).—White, spring and summer, creeping habit.

Armeria cephalotes (Thrift or Sea Pink).—A beautiful plant, either for rockwork or edgings, crimson flowers in autumn, compact, neat growth.

Asperula odorata (Woodruff).—White, sweet, flowering in spring, habit dwarf.

Asters (Michaelmas Daisies).—One or two of the dwarfer species, such as *Alpinus*, purple, summer, may be used ; but most of the Michaelmas Daisies are better in the border.

Aubrietias.—Useful companions for Arabises. The varieties of *deltoidea*, such as *Campbelli*, violet ; *Leichtlinii*, rose ; and *Fire King*, bright red, are among the best.

Campanulas.—The dwarf species provide us with many beautiful rock plants, notably *Alpina*, dark blue, summer ; *Carpatica*, blue, and its white variety, summer ; *fragilis*, lilac purple, summer ; *Garganica*, blue, summer ; *isophylla*, lilac, summer, trailing ; *Raineri*, blue, summer ; and *rotundifolia*, blue, summer.

Cerastium Biebersteinii is a silvery-leaved carpeter.

Cyclamen.—The hardy species *Coum*, rosy red, spring ; *Europaeum*, bright red, late summer ; and *hederaefolium*, (Ivy-leaved) of different colours, spring, are valuable for rockeries and banks. They thrive in shade.

Cypripediums (Lady's Slippers).—These beautiful hardy Orchids do best with shade, and in a peaty compost ; a sandy bank does not suit them. *Spectabile*, rose and white ; and *Calceolus*, yellow and red, summer, are two of the prettiest.

Dianthus (Pinks).—The value of this genus was pointed out in Chapter VII. *Alpestris*, red, early summer ; *Alpinus*, dark rose, early summer ; *arenarius*, white, spring ; *caesius* (Cheddar Pink), rose, spring ; *cruentus*, blood red, summer ; *deltoides* (Maiden Pink), rose, summer ; *glacialis*, red, early summer ; *neglectus*, rose, summer ; and *superbus*, rose, summer, are all worth including.

Dodecatheons (American Cowslips).—*Meadia*, white or lilac, spring ; and its varieties *elegans*, *frigidum*, and *giganteum* are desirable things. They like a moist place.

Draba (Whitlow Grass).—Aizoon, yellow, spring, should be grown.

Dryas (Mountain Avens).—The creeping evergreen octopetala, white, late spring, may be grown, and should have peat in a cool spot.

Erigeron (Fleabane).—The dwarf species *Roylei*, purplish blue, summer, may have a place.

Erinus Alpinus, violet, spring, is a useful plant.

Erodium (Heron's Bill).—Two species are suitable, namely *macradenium*, violet, summer ; and *Reichardi*, white, summer.

Erythroniums (Dog's Tooth Violets).—Charming flowers of spring. *Americanum*, yellow ; *Dens Canis*, deep rose ; *grandiflorum*, pale yellow ; and *giganteum*, white, are good.

Gentiana (Gentian).—These give us the rich blues which are so comparatively uncommon. *Acaulis*, spring ; *Andrewsi*, summer ; *Bavarica*, summer ; and *verna*, spring ; are four of the best of these valuable flowers.

Geranium (Crane's Bill).—Several of these are excellent, and as they spread rapidly they soon cover a good deal of space. *Cinereum*, grey leaves and light red flowers ; *argenteum*, silvery leaves and light red flowers, summer ; and *Lancastriense*, rose, early summer, are three of the best of the dwarf species.

Gypsophila repens, creeping, flowers white and light rose, summer, is serviceable.

Helianthemums (Sun Roses).—The varieties of *vulgare* are the most suitable. They will grow almost anywhere, and flower profusely.

Hutchinsia Alpina, white, spring, is a pretty Alpine, and does well in sandy soil.

Iberis (Perennial Candytuft).—These pretty flowers are extremely useful, as they establish themselves in most soils, and flower profusely. *Corifolia*, white, spring ; *Gibralta-*

rica, white, suffused with pink, early spring ; and semper-virens, white, late spring, are all good.

Iris.—The dwarfer, sun-loving forms should be represented, particularly *cristata*, blue and yellow, spring ; *biflora*, purple, spring ; *pumila*, lilac purple, spring ; and *reticulata*, violet and yellow. See also special chapter.

Leontopodium Alpinum (Edelweiss).—Although the time has long passed since this plant had any special interest it may be grown by those who admire its white, woolly foliage.

Linaria Alpina (Toad Flax), violet blue, summer and early autumn, is a neat Alpine.

Linnaea borealis is an interesting evergreen, with flesh-coloured flowers in spring.

Linum (Flax).—The bright flowers of these useful plants make them very welcome. *Alpinum*, blue, spring ; *arborescens*, yellow, spring ; *Narbonense*, blue, late spring and early summer ; and *perenne*, pale blue, early summer, are all pretty.

Lithospermum prostratum (Gromwell), a trailing sub-shrub, bright blue, summer, is a valuable plant. It enjoys sandy soil.

Macrotomia (*Arnebia*) *echioides*, yellow, spring.

Myosotis alpestris (Forget-me-not), blue, summer, is worth including.

Narcissi.—The smaller forms, such as *Bulbocodium* (Hoop Petticoat) ; *cyclamineus*, *Johnstoni* Queen of Spain, *juncifolius*, *minor*, and *triandrus* (Angel's Tears) should be included. They look charming on rockwork.

Nierembergia rivularis, white, July, trailing, may be chosen for a damp, shady place.

Omphalodes verna, blue with white throat, spring, is a dainty little creeper that will grow almost anywhere.

Onosma Tauricum (Golden Drop) is a charming yellow summer flower that thrives in sandy soil.

Oxalis (Wood Sorrel).—Both *Bowiei*, rose, summer ; and *floribunda* (rosea), rose, spring, are good.

Papaver (Poppy).—*Alpinum*, yellow, summer ; and *nudicaule*, orange, with its yellow and white forms, summer, should be grown.

Phlox.—*See* special chapter for a selection of dwarf forms.

Primula (Primrose).—Several species are indispensable for the rockery. *Cortusoides*, rose, early summer ; *denticulata*, lilac, late spring ; *formosa*, lilac, yellow eye ; *Japonica*, crimson ; and other coloured forms, late spring, like a cool, moist spot, and peat. *Marginata*, violet, spring ; *rosea*, rose, late spring, likes a cool spot ; *Scotica*, purple, yellow eye, late spring ; and *viscosa*, rosy purple with white eye, summer, are a few of the most valuable species. The varieties of *Alpine Auricula*, *Cowslip*, *Polyanthus*, and *Primrose* must not be forgotten. They are particularly good in cool spots, and luxuriate in damp soils.

Pyrola rotundifolia (Winter-Green), white, sweet, summer, is worth growing.

Ranunculus (Crowfoot).—Several species are good for the rock garden, and *aconitifolius*, white, spring, and *amplexicaulis*, white, spring, are two of the best.

Saponaria ocymoides (Soapwort).—A pretty, pink, summer-flowering trailer.

Saxifraga (Rockfoil).—One of the most important genera for the particular purpose we have in view, and one which comprises a considerable range of forms. The following should certainly be included. *Aizoon*, cream, late spring ; *ceratophylla*, white, spring ; *cordifolia pyramidalis*, red, spring ; *cotyledon pyramidalis*, white, early summer ; *granulata*, white, spring ; *hypnoides*, white, late spring and early summer ; *longifolia*, white, summer ; *oppositifolia major*, purple, spring ; and *Wallacei* (Camposi), white, spring. A classification of the genus, and a

description of all the best forms, will be found in "Cassell's Dictionary of Practical Gardening," Vol. II.

Sedum (Stonecrop).—There are many species in this genus, and among them may be named as suitable for rockwork, acre, yellow; album, white; glaucum (Hispanicum), pink; lydium, pink; pulchellum, rosy purple; rupestrium, yellow; and Sieboldii, pink.

Sempervivum (House Leek).—This also is a large genus. A small selection may include arachnoideum (Cobweb House Leek), red; and Tectorum, red.

Silene (Catchfly).—Acaulis, pink, summer, and its varieties alba, white, and rubra, red; alpestris, white, early summer; maritima, white, summer; and Virginica, crimson, summer, are a few of the best of this genus.

Soldanella Alpina, violet, spring, is a pretty plant.

Sweet Peas, Cupid, various colours, summer.

Thymus lanuginosus (Woolly Thyme) is useful.

Triteleia uniflora, lilac, spring, is a bulbous plant which does well in warm soils.

Tropaeolum polyphyllum, yellow, early summer, is a trailer that may be pressed into service.

Veronica (Speedwell).—Several species of this large genus are available, notably Chamaedrys, blue, spring; saxatilis, blue, summer; Teucrium, blue, summer; and T. dubia (prostrata or rupestris), blue, summer.

Waldsteinia trifolia, yellow, spring.

CHAPTER IX.

ON BEAUTIFUL FLOWER BEDS.

ALTHOUGH there has been a great development in garden borders during the past few years, there are very few gardens in which flower beds are not found. In some of these, unfortunately, very elementary principles are applied. The design is commonplace, and the effect is tawdry. A great many gardeners still look on a breadth of "Geraniums" as the highest form of bedding out. However, things are not so bad as they were, and as time passes we may reasonably expect to see more originality displayed.

For practical purposes a bed may be distinguished from a border by the fact that it occupies a position in the interior of the garden, whereas the latter is on the outskirts. The one is seen on all sides, the other usually presents only one frontage. It is scarcely necessary to point out the importance of the distinction. Where economy has to be considered we can fill up the back of a large border with cheap shrubs, but Aucubas are not admissible in flower beds.

In the chapter on the adornment of lawns it was suggested that we might associate turf and flowers in one of two ways—to have flower beds with grass walks between, or to have a lawn with beds on the outskirts. It is a mistake to attempt a blend of the two. Groups of beds might be formed on very large lawns, although even in such cases they are easily overdone, and the author is familiar with more than one noble establishment wherein what should be a fine extent of lawn is patchworked up with beds in a way that robs it of all dignity and repose. In the case of small places it is a disastrous error to cut severely into a lawn. The beds, it is true, look better for their foil of cool turf than they would do on gravel, but the lawn, as a lawn, is spoiled.

The garden lover who has made up his mind that he wants a real lawn, however small, should exercise restraint in respect to flower beds. He should teach himself that two or three good beds on the margin will look a great deal better than a number of poor ones peppered about all over it.

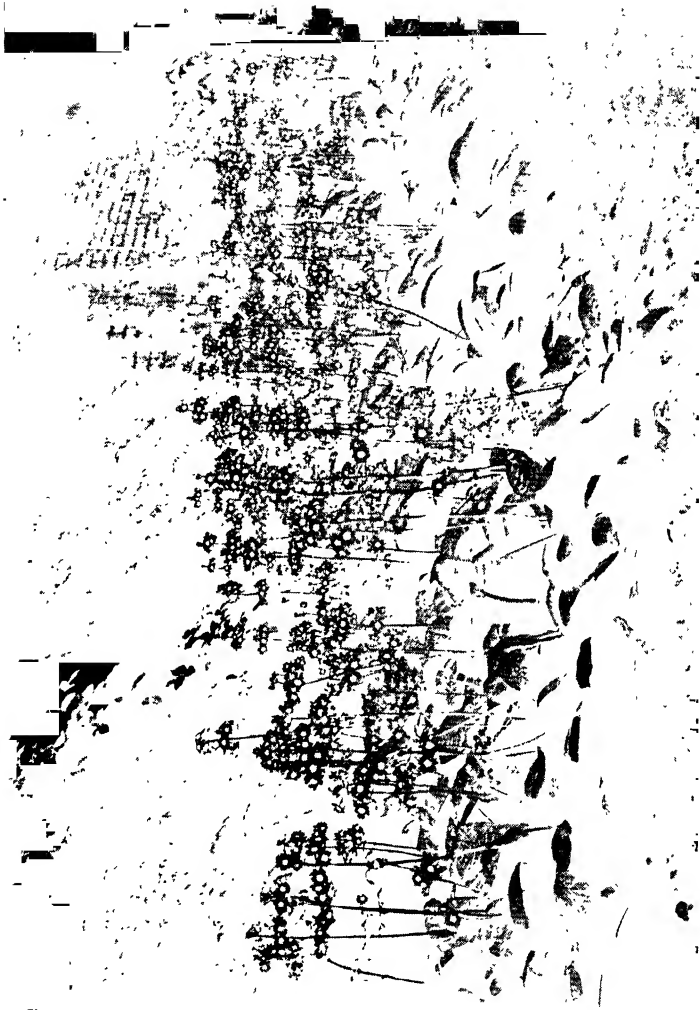
In considering the size and form of beds, due regard must be had to certain practical considerations. In the first place, beds on the outskirts of a circular lawn should be curvilinear, and not rectangular. In the second place, the plainer the outline the less work there will be in maintaining the edges. A “star” shaped



Photo: Mr. A. C. Leney.

PLANTS FOR SHADE—A COLONY OF DAFFODIL EMPEROR AT THE GARDEN HOUSE, SALTWOOD, HYTE.

(See pages 51-2.)



PLANTS FOR SHADE—A COLONY OF PRIMULA JAPONICA PULVERULENTA. (See pages 51-2.)

bed may be pretty enough in its way, but clipping the edges in the various rays (and unclipped edges soon give a very untidy appearance to a bed) will be a somewhat tedious business. In the third place, the outer edge of the bed should not be carried close to the walk or border, so as to leave a very narrow verge, which is bad to mow, and liable to crumble down. Two feet at least should be allowed. In the fourth place, the beds should not be large in proportion to the size of the lawn. They are not intended to dominate it.

What is known as "the bedding system" has come to have a certain specific meaning. It is associated in most people's minds with tender plants, such as "Geraniums," *Heliotropes*, and *Lobelias*, which have to be wintered under glass. There is no reason, however, why bedding out should not be practised (1) entirely with hardy plants, or (2) with plants treated as annuals and not preserved through the winter. As an example, we might have a bed beautiful in spring with *Pyrethrums*, and, as these plants lift safely when in full growth, they could be moved away when they went out of bloom, and their places occupied by *Salpiglossises*, *Antirrhinums*, or some other plant raised from seed in gentle heat early in the year. Or, as another example, a good strain of coloured *Primroses* and *Polyanthuses* might be planted, with a sprinkling of *Tulips*, in autumn, and lifted in June to make way for

a mixture of Comet Asters and the beautiful Tobacco, *Nicotiana Sanderae*, which lasts far on into autumn, and is especially beautiful towards evening.

Every flower-lover should strive for two main things in his beds—grace and freshness. The first is best secured by a simple combination. The effect of mingling a great many different kinds of plants in one bed is frequently as unfortunate as mingling a great many different flowers in a bouquet. There is apt to be a jumble of inharmonious elements. The second is a question of reflection and observation. It is not difficult to find happy combinations, and there is sufficient variety of material to afford scope for many different plans.

As instances of success are often helpful, the author gives a few which he has himself enjoyed. In every example it will be seen that the materials are simple and inexpensive :

(a) A bed cleared of bulbs was planted with dwarf Bouquet Asters and *Salpiglossises* in mixture. The Asters, which grew about nine inches high, formed the groundwork. They were full of bloom, and remarkably pretty, but a little formal in themselves. The graceful, arching stems of the *Salpiglossises*, laden with their beautiful urns and drooping over the Asters, entirely relieved the stiffness. Both plants were raised from seed in spring and planted in June.

(b) A large bed of Wallflowers was cleared in early June, and planted with *Nicotiana Sanderae*, Comet Asters, and bush Sweet Peas. This formed a remarkably effective combination, yet it only cost a few pence, as all the plants were seedlings. Bush Sweet Peas may be introduced to fairly large beds with excellent effect. They are compact, but brilliant and long lasting. The looser growth of the Tobacco takes off any stiffness.

(c) A bed was planted in autumn with the single white *Pyrethrum Dawn*, mixed with the graceful rosy *Heuchera sanguinea*. Blooming early in a warm spot, the *Heuchera* was in flower with its neighbour.

(d) A harmony in blue and mauve was secured by planting the beautiful *Iris pallida* with the lilac *Pyrethrum Roland* and the blue Flax, *Linum perenne*.

(e) An extremely graceful combination was that of the white Bridal Wreath plant, *Francoa ramosa*, with the pretty double rose annual *Clarkia elegans flore pleno*. Had the *Clarkia* been spoiled by overcrowding it would have been over long before the Bridal Wreath was at its best, but being severely thinned it lasted far into the summer.

The idea of spring as well as summer beauty should always be in the mind of the planter, and he must never be afraid of two plantings. With

one alone it is practically impossible to avoid bare beds for a considerable part of the year. Bulbs are, of course, very useful in the spring, but it is a mistake to rely on them alone, as is generally done in the public parks, because the soil is bare from autumn to spring. Here comes in the value of useful things like Arabises, double and single, Aubrietias, and Forget-me-Nots as carpeters. They are all easily raised in thousands out of doors from twopenny packets of seed in late spring, and are ready for planting in autumn. Tulips associate well with all of them. Primroses and Polyanthuses are also carpeters, and lovely beyond praise when in full bloom. They are not available for many town gardeners, as they do not thrive in an impure atmosphere. Wallflowers carry their foliage through the winter, but they are not suitable for associating with bulbs, as they grow very strongly in spring. They must stand on their own bottom, which they are quite good enough to do.

A bed of Canterbury Bells makes a nice, green, winter covering, and bulbs may be dotted among the plants, to bloom before the latter get into active growth. The fact that Canterbury Bells are slow growers in their early stages might be more taken advantage of than it is for interpolating other things.

Bold, distinctive flowers of pronounced individual merit like May flowering Tulips, Carna-

tions, and tuberous Begonias may well have a bed to themselves. The author has heard old-fashioned bedders object to a bed of these Tulips because, being late bloomers, they "get in the way of the bedding plants." This is a flagrant case of trying to merge the greater into the less. The Tulips can be lifted towards the end of June, laid in somewhere to ripen, and their places filled with Sander's Tobacco, Comet Asters, and other things vastly more graceful and beautiful than a noisy flaunt of "Geraniums." The author has had a very pretty effect before now by planting Heddewig's Indian Pink, *Dianthus Heddewigii*, raised from seed sown in February, in a bed in June, and dotting a few *Salpiglossises* among the plants to break the uniformity. A basket bed of Ivy-leaved Geraniums looks well on a large lawn.

It would probably do away with a great deal of hesitation if flower-lovers realised how well all bulbs lift before or after blooming. Daffodils are perhaps the most complaisant of all. It might really be imagined, from the desolating array of empty flower beds one sees in many gardens up to June, that there were no such things as cheap, easily grown, easily shifted, spring-flowering hardy plants. If nothing more interesting could be provided to keep beds alive, the hardy annuals, of which penny or twopenny packets are always available, could be drawn

upon. Pretty little things like the pink Soapwort (*Saponaria*), *Silene pendula compacta*, *Limnanthes Douglasii*, and *Nemophila insignis*, flower charmingly in spring if sown early the previous September:

The value of *Violas*, Thrift, and Pinks as edgings must not be overlooked. The selection of *Violas* is now considerable, and the flowers are almost good enough to stand on their own merits as bedders. This they might easily do if it were not for the flatness, as the flowers are extremely beautiful, and produced in great profusion over a long period. They may be used for carpeting—*Liliums*, for example—and also for edgings in broad bands.

The well-known white Pinks, Mrs. Sinkins and Her Majesty, are both capital edging plants.

Bold autumn effects can be secured with Michaelmas Daisies and early Chrysanthemums, and both these splendid plants may be drawn upon for large beds.

Something will be found about stumps and forks in the chapter on Roses. These may be introduced into large flower beds with splendid effect. They are often beautiful objects in themselves, as well as valuable for breaking stiff outlines.

Remember that a bold, solitary clump of Pampas Grass, or Red Hot Poker (*Kniphofia*), is often very effective among flower beds.

CHAPTER X.

ON SOME BEAUTIFUL BULBOUS FLOWERS.

A CLASS of plants which includes Daffodils, Lilies, Tulips, and many Irises will be accepted at once as of the first importance in the flower garden. Were it limited to these alone we should look upon it as thoroughly worthy of study, but so far is this from being the case, that we have amongst the bulbs a long array of beautiful and valuable plants.

Volumes might be—volumes have been—written about various bulbs. Specialists have dealt individually with Daffodils, Irises, and Lilies. Even the Crocus—which, if not a bulb botanically considered, is so from a garden point of view—has its monograph. This is evidence enough of the interest taken in bulbs by flower-lovers, and if more were wanted it is supplied in an equally convincing, if less literary, form in the rapidly multiplying lists of trade dealers.

Bulbs are being more and more used beyond the confines of the flower garden proper. They are being naturalised in the semi-wild garden

outskirts, in meadows, and in woodlands. There is nothing much more delightful than a nodding colony of Poet's Narcissus in the tangled grass of a shady bank beyond the dressed grounds, or of Grape Hyacinths on a groundwork of Ivy in a dell.

The stiff beds of Hyacinths in the large beds of the city parks give only the most meagre idea of the uses to which bulbous flowers can be put in spring. Municipal gardeners do praiseworthy work with the means at their command, and in the circumstances which surround them, but country flower-lovers need not copy them. As a matter of fact, a bed of Hyacinths is a very unsatisfactory object, about on the same plane as the bed of "Geraniums" which obtrudes its aggressive presence so frequently in summer. The cheaper bulbs may—indeed, should—be utilised for spring bedding, but they look much better grouped with a good carpenter than as mere masses of unrelieved colour.

Circular and oval lawn beds look very well in spring planted with groups of Tulips carpeted with white Arabis or Forget-me-Not. The early Dutch varieties appeal to people of moderate means on account of their cheapness and cheerful colours, but the tall May bloomers are bolder, finer, and more lasting. Clumps, with or without carpets, will also enliven the mixed borders at a period when the herbaceous plants are only just starting growth.



CAMPANULA RAINIERI. (See page 62)



"STONES . . . AS RECEPTACLES, AND NOT AS STATUES." (See page 56.)

Narcissi should be used in beds and borders, as well as in the grass. Such fine, free things as *Horsefieldi*, *Sir Watkin*, *Barri conspicuus*, *Henry Irving* (early), *Duchess of Westminster*, *Empress*, *Emperor*, and *Stella Superba*, are worthy of being planted freely. (*See special chapter.*)

Calochorti are lovely summer flowering bulbs for warm, sunny borders. Little colonies of them are delightful. The colouring of the flowers is very delicate and pleasing.

Chionodoxas (*Glory of the Snow*) are dwarf plants in the way of the *Scillas* (*Squills*), mostly blue of different shades, and amongst the earliest of flowers. *Luciliæ*, *grandiflora* and *Sardensis* are three charming sorts. *Colchicums* (*Meadow Saffrons*) are worthy of attention. The autumn bloomer (*autumnale*) is useful and cheap.

The early Dutch *Crocuses*, such as *Mont Blanc*, *Sir Walter Scott*, and *Golden Yellow* are pretty and very cheap. There are, too, a number of rarer species, both autumn and spring blooming, such as *biflorus*, *chrysanthus*, *Imperati*, *vernus*, *sativus*, *speciosus*, and *Sieberi*, which are really exquisite little flowers.

The hardy *Cyclamens* may be included, like the *Crocuses*, amongst bulbous plants by courtesy. They look very dainty when grown in a little colony on a raised border, or on the rockery.

The *Erythroniums* (*Dog's-tooth Violets*) have marbled foliage and distinct flowers.

Another quaint plant is the *Fritillaria*, or Snake's Head Lily, with drooping, tessellated flowers. The best known one (excluding the noble *F. Imperialis*, or Crown Imperial—a really splendid plant for border clumps) is *F. Meleagris*. *F. armena* and *F. recurva* are both equally worth growing.

Gladioli are worth specialising, and many people will grow them under names in beds, as they do Carnations and Roses ; but it must not be forgotten that they are capable, when grown in clumps, of greatly enhancing the beauty of a herbaceous border in summer and early autumn. For this purpose the cheaper species may be chosen, such as *Brenchleyensis*, *Colvillei*, *floribundus*, and *psittacinus*. Most of these flower much earlier than the beautiful *Gandavensis* hybrids. (*See special chapter.*)

The true bulbous *Irises*, as distinguished from the Flags and Cushions, include some of the most exquisite of hardy flowers. Not only are the popular English and Spanish *Irises* included in the bulbous section, but such delightful little flowers as *alata*, *Bakeriana*, *Histrio*, *Persica*, and its variety *Heldreichii*, and *reticulata* and its several varieties, belong to it. (*See special chapter.*)

Leucojums (Snowflakes) are early bloomers, as chaste as, but larger than, the Snowdrops.

The *Liliums* give us some of the most glorious

of garden flowers. *L. auratum*, and its superb varieties *platyphyllum*, *rubro-vittatum* and *Wittei*, are magnificent in the deep peat and loam of *Rhododendron* beds and elsewhere. *L. giganteum* lifts its stems with their crown of lovely white flowers ten and twelve feet high. *Brownii* and *Humboldtii* are also grand sorts. Such popular Lilies as *candidum* (the Madonna Lily), *Chalcedonicum*, *croceum*, *longiflorum* (which is charming when mixed with *Tuberoses*), *Martagon* (Turk's Cap), *speciosum* (*lancifolium*), *tigrinum* (Tiger Lily), and *umbellatum* are as easily grown as any border plant. *Canadense* and *pardalinum* (Panther Lily) enjoy a peaty compost. (See special chapter.)

The *Muscaris* (Grape and Feather Hyacinths) are pretty flowers. *Botryoides*, *comosum*, *monstrosum*, and *conicum* Heavenly Blue are very popular; the Musk Hyacinth, *moschatum*, also enjoys favour.

Ranunculuses, included by courtesy, are old florists' flowers; they are a little too correct for many flower-lovers, but the colours are brilliant.

Scillas and *Snowdrops* give us two of our prettiest early bulbs. The common blue *Squill*, *Scilla Sibirica*, is a very cheerful little flower; and so is *bifolia*, in its many charming varieties. *S. festalis* or *nutans* is frequently naturalised. The ordinary single *Snowdrops* make charming colonies in grass, and the better sorts, such as

Galanthus Elwesi, *G. plicatus*, and *G. nivalis Imperati*, are worthy of special places.

Tigridias (Tiger Flowers) are extremely showy plants, though the individual flowers are fleeting.

Trillium grandiflorum is a beautiful white flower, delicious in a colony in a shady spot. And *Watsonias* also are beautiful in sheltered spots.

This is but a glance at a few of the better known bulbous flowers, but it may suffice to show the flower-lover how much he would miss if he did not give some study to the bulbs. When his attention is fairly turned to them it is quite likely to extend to the less familiar members of this great class, such as *Alliums*, *Anomatheca*, *Babianas*, *Bravoas*, *Brodiaeas*, *Ixiolirions*, and *Puschkinias*, amongst which will be found many uncommon and yet beautiful flowers.

He may even try his luck with such magnificent plants as the *Belladonna Lily*, *Crinums*, and *Nerines*, which are not hardy, but may sometimes be grown successfully out of doors in warm and sheltered spots.

Most bulbous flowers thrive best in sandy, gritty loam, and as a class do not care for clay. But happily for clay-holders, two great bulbs—*Daffodils* and *Tulips* (*see* special chapters)—thrive on strong land if it is thoroughly worked. The author finds that the magnificent May-flowering *Tulips* never give more robust stems, larger

flowers, or richer colours than on clay ; and what is more, their lasting powers are greater than on sand. The truth is that they love moisture, as Hyacinths and Daffodils also do, and very few growers give them half enough of it.

CHAPTER XI.

ON CERTAIN CHEAP BUT BEAUTIFUL FLOWERS.

To such an extent have many people carried the rage for hardy perennials that any ugly weed is grown by them so long as it comes within the pale. Conversely, a large number of really beautiful garden plants are neglected because (1) they are annuals, (2) they are cheap. Let the perennial fanatic tell us, if he can, of a more beautiful plant than the double variety of *Clarkia elegans*, or *Phacelia campanularia*, or the Scarlet Flax, or any well-known *Godetia*, or the Rose Mallow, or Sweet Pea. Let him name a more brilliant flower than the Shirley Poppy, a more fragrant one than the Sweet Sultan.

It is silly beyond measure to look on annuals as though they were some low order of vegetable life. The soft cushions of tender blue which *Nemophila insignis* forms on the rockery in spring are not less pleasing because they have come from a penny packet of seed sown the previous September. The truth is that there are a great many flowers of annual duration, which will enliven

the beds, borders, and rockeries for many weeks together, that can be bought for the price of a morning paper. If they do not give satisfaction in some cases it is because they are grown as carelessly as a field Turnip—nay, more so, for the average farmer at least has sense enough to practise thin seeding, and subsequent “singling.”

Annuals make very pretty groups in beds and borders, and remain in beauty for as long a period as most perennials, if they are thinly seeded, and well singled out afterwards. A man would not attempt to cram a dozen Rose bushes on to one square foot of ground, and he should not work on the ridiculous assumption that an annual is so different in construction from other plants that it will thrive when crowded at the rate of a hundred plants to the square inch.

The flowers named in the following paragraphs are all hardy, and suitable for sowing in the open towards the end of March or early in April. They are all cheap. They are all good enough in every way to make (according to height) edgings, clumps, or groups. It is the rule of all seedsmen to give the colour and height on the packets.

One of the few yellow annuals is *Bartonia aurea*, a good plant, of which a dwarf form called *nana* is now available. The Candytufts give us several colours, of which the most useful are crimson and white. Amongst the Chrysanthem-

mums we find two beautiful varieties of coronarium in W. E. Gladstone and Lord Beaconsfield ; and a most valuable variety of segetum in Morning Star. These are all grand for cutting. With its tall, arching stems, furnished from top to bottom with double pink flowers, *Clarkia elegans flore pleno* presents itself as one of the most valuable of garden flowers. It has several very pretty single sisters. *Collinsia bicolor*, though less striking, is a good annual, with blue and white flowers.

Convolvulus, Cornflowers, and *Coreopsis* are too well known to need more than mere inclusion. We get useful orange annuals in *Erysimum Peroffskianum* and *Eschscholtzia Californica*, both of which are worth growing, the latter in particular—it is sometimes biennial. *Eschscholtzia Mandarin* is also an excellent plant. *Eutoca viscida* is not of such good habit as some annuals, but its fine blue tint is very welcome. The *Gilias* and *Leptosiphons* are closely related. Of the plants grown under the former name *tricolor* should be chosen ; and of the latter *densiflorus albus*.

The *Godetias* are magnificent annuals—perhaps the most valuable grown, for they combine compact habit (when thinly sown) with large flowers, bright colours, and remarkable duration. *Duchess of Albany*, white ; *Lady Albemarle*, carmine ; *Whitneyi fulgida*, crimson scarlet, white



THE PROPHET FLOWER, MARCROTOMIA (ARNEBIA) ECHIOIDES (See)



CUPID SWEET PEAS ON A ROCK BANK IN THE AUTHOR'S GARDEN. ALTHOUGH OFTEN A FAILURE, THEY FLOWERED
SPLENDIDLY HERE. (See page 86.)

centre; and Lady Satin Rose, pink, should be chosen. *Gypsophila elegans*, which is sometimes perennial, is useful for cutting. A very dainty little carpeting annual, growing only a couple of inches high, is *Ionopsidium acaule*, which quite covers the ground with its blossoms.

An entirely distinct annual, valuable for its soft green, fleecy, fern-like foliage, which turns deep crimson in autumn, is *Kochia scoparia*. The Larkspurs are worth growing. The Rose Mallows are represented best by the two beautiful plants grown under the names of *Lavatera splendens rosea* and *alba*, varieties of *L. trimestris*. They are splendid annuals, even if inclined to straggle. *Limnanthes Douglasii* is a dwarf yellow and white flower, good both for autumn and spring. The Scarlet Flax, *Linum grandiflorum rubrum*, is very brilliant.

Of the popular Lupins, *nanus* (also its white variety) and *subcarnosus* should be included. Lovers of sweet flowers will not forget Mignonette, but they may the Night-scented Stock, *Matthiola bicornis*, which, commonplace in appearance—especially by day, when it looks a mere weed—at night is deliciously perfumed. It should be sown near a door or window, in an inconspicuous place. Mignonette, easily grown as a rule, fails to thrive in some places, and a dressing of mortar rubbish, or lime, should then be tried.

The Nasturtiums (*Tropaeolums* of the botan-

ists) may be grown, under restrictions. Unless kept in check they will overrun the garden, and, seeding themselves, become an intolerable nuisance year after year. Empress of India, crimson, is one of the best of the dwarfs, and Sunlight, pale yellow, of the taller sorts. The newer Ivy-leaved Nasturtiums which are now to be obtained from some of the larger seedsmen are good plants.

The Nemesias and Nemophilas are useful, and so is the Love in a Mist (*Nigella*). *Phacelia campanularia* should have special attention, as giving a valuable colour (dark blue) with dwarf and compact habit. It is one of the best annuals we have. Poppies have been greatly improved of recent years, and the popular "Shirleys" must be grown. It is true that they are somewhat fugitive, but they make beautiful, shimmering breaks of colour when grown in a mass. *Saponaria Calabrica* and *Silene pendula compacta* give us low, pink cushions in spring if sown in late summer, and are very gay and sparkling. Scabiouses should be grown for their fragrance, and so should the dwarf, white, little-known annual called *Schizopetalon Walkeri*, which is piquantly perfumed. Of the Sweet Sultans the yellow is the sweetest.

There are one or two annual Sunflowers well worthy of inclusion, notably that called *Helianthus cucumerifolius* and its variety *Stella*.

The Sweet Peas have now become a florist's

flower almost as important as the Carnation. A large supply of these lovely flowers should be grown, as they are so serviceable for cutting. An early bloom is often secured by sowing in autumn, but those who want plants of great vigour, qualified to produce large, long-stemmed flowers in abundance for many successive weeks, should trench and manure the ground in winter, and put out plants 6 inches apart in April that have been raised in pots in a frame. Stronger plants are thus secured, and losses from vermin and slugs greatly reduced. A representative collection should include the following varieties: Dorothy Eckford, white; Hon. Mrs. Kenyon, cream; Countess Spencer, pink; Mrs. Hardcastle Sykes, blush; John Ingman, carmine; Helen Pierce, blue; Mrs. Walter Wright, mauve; Queen Alexandra, scarlet; Miss Willmott, orange; Bolton's Pink, pink; Lady Grisel Hamilton, light blue; Black Knight, maroon; Coccinea, cerise; David R. Williamson, indigo blue; Agnes Johnston, rose and cream; King Edward VII., crimson; Romolo Piazzani, violet blue; Henry Eckford, orange salmon; Unique, blue and white; and Triumph, orange. Others can be added according to taste.

Virginian Stocks, and the brilliant Viscarias, may conclude the list of popular annuals. Others not so well known, but certainly worth growing, are *Eucharidium grandiflorum*, *Glaucium tricolor*,

Kaulfussia amelloides, *Lasthenia Californica*, *Linaria bipartita*, *Malope grandiflora*, *Omphalodes linifolia*, *Oxyura chrysanthemoides*, *Papaver glaucium* (a fine Poppy), *Platystemon Californicus*, and *Sanvitalia procumbens*, double variety.

It may be well to mention that such half-hardy annuals as *Phlox Drummondii*, Ten-week Stocks, and Asters may be treated as hardy by sowing them in April, but they are best raised under glass.

A chapter on cheap flowers would be very incomplete if it did not make mention of such valuable plants as Wallflowers, Sweet Williams, Foxgloves, Canterbury Bells, Indian Pinks, Brompton Stocks, and Sweet Rockets, which are generally treated as biennials—that is, sown in late spring or early summer, flowered the following year, and then thrown away. The seedsmen now sell fine, selected strains of these popular flowers, and most valuable they are where much space has to be filled cheaply, for they can be raised in thousands from seed costing only a shilling or two. Late and thick sowing is the great mistake with these plants. They should be sown in May, and put out in lines some 6 or 8 inches apart in July; they then become sturdy, and make grand plants for putting out in autumn.

CHAPTER XII.

ON TREES AND SHRUBS.

THE average planter looks to trees for two things—shade and shelter. He rarely seeks in them individual beauty. When he comes to realise that there is at least as much ornament and interest in an Oak as in a Dahlia, we shall see less of the thoughtless planting which now prevails. A garden-maker tells himself that his garden needs shelter from certain quarters. This immediately suggests to him the necessity for running up a belt as rapidly as an American syndicate runs up a skyscraper, with the result that instead of improving his garden he permanently disfigures it, for the trees crowd and spoil each other.

A planter should educate his eye until he can get as much pleasure out of a well-grown tree as an architect can out of a noble and harmonious building. And just as the latter would look with loathing on a shapeless, ugly, and ill-designed structure, so the former should refuse to contemplate, except with distaste, a lopsided, Cabbage-headed tree.

The fact that a tree occupies so dominating a position when it has grown to its full size should teach the planter the necessity for extreme circumspection. He will be wise to carefully study the position before he puts spade to soil. Let him try to realise what each tree will be, not on the day of planting, but ten, twenty, thirty years afterwards. He will then be able to judge of the suitability of the positions that he assigns to them, both in relation to the house and to the general surroundings.

A young tree which is allowed plenty of room to develop will generally assume a graceful habit without much artificial aid. The knife may, indeed, do harm if used without consideration, as it may produce the early spreading habit which is the sure precursor of ultimate Cabbage-headedness. On the other hand, a little careful shaping may sometimes be needed, in order to preserve to the tree a good leader and an upright habit of growth.

In spite of the vogue for carved trees (topiary) which the early days of the twentieth century brought in (together with the odour of petrol), it cannot be doubted that the good taste of the nation will see that naturally grown trees are calculated to give the most lasting pleasure. Carved trees may have their place. A man coming into possession of Levens Hall might conceivably hesitate before cutting

down and burning the remarkable examples of topiary which exist there. But it would be a bad day for British gardens and British landscape if the majority of designers decided on imitating them.

It may be accepted that a limited number of carefully placed forest trees will be an embellishment to a garden, and when the question of choice of material arises, the planter will find himself greatly helped by the good collections which now exist in certain large gardens. At Kew, for instance, he will find nearly all the best varieties of Oaks, and it may surprise him to discover how much variety, as well as beauty, there is in these noble trees.

The Elm he will be wise to eschew, so far as the garden and the immediate neighbourhood of walks are concerned, on account of its weakness for casting its branches; moreover, it is very greedy.

The Beech is a handsome tree, but slow-growing; nevertheless, a place should be found for the Copper Beech, for the sake of its rich colour.

Poplars are extensively planted, the Lombardy, *Populus nigra pyramidalis*, in particular. In the case of this tree, planters are undoubtedly tempted by its cheapness and very rapid growth, for it cannot be called a distinguished tree. It certainly has its uses. It is good for a summer

sheltering belt, because if headed at about 6 to 8 feet it will break freely right up the stem, and form a close pyramid of foliage. But it will not have distinctive beauty. A far more effective tree is the White Poplar or Abele, *Populus alba*, which thrives in a cool, moist spot. The Aspen, *Populus tremula*, is also good.

The Sycamore is a valued tree too, and there are several distinct varieties of it.

The Ash, like the Elm, is open to the objection, as a garden tree, that its roots make hungrily for every manured bed in their vicinity, and so impoverish it that the rightful occupants fail to thrive.

The Chestnut is one of the most valuable trees we have. Not only does it assume a pleasing form, and clothe itself with handsome foliage, which is beautiful both in spring and autumn, but it produces a magnificent inflorescence. No one who has seen the famous avenue in Bushey Park when at its best will ever forget the sight.

The Birch is worthy of attention. The glistening stems of the Silver Birch, *Betula alba*, are familiar features of the woodland. There are several valuable forms of this beautiful tree.

The Maples are a numerous company, as in addition to the well-known common Maple, *Acer campestre*, we have the Japanese Maple, *A. palmatum*, with its several beautiful varieties; the Norway Maple, *A. platanoides*; the variegated



* BED OF DOUBLE WHITE ARABIS AND TULIPS. (See page 72.)



Photo: H. N. King, Shepherd's Bush, W.

THE BASKET GARDEN AT MESSRS DE ROTHSCHILDS GUNNERSBURY PARK. (See page 73.)

Negundo, and others. It has to be remembered, however, that some of the variegated Maples are not thoroughly hardy.

The Plane is a useful tree, particularly for town planting, and the same may be said of the Lime or Linden, in a somewhat modified degree. The London Plane, *Platanus acerifolia*, is the best of all trees for withstanding the deleterious effects of an impure atmosphere, but as regards intrinsic beauty some of the varieties of the Oriental Plane, *P. Orientalis*, can claim precedence.

The Pagoda Tree, *Sophora Japonica*, and its variety *pendula*, are good trees.

It may be added, as a check upon those who might construe the strictures herein upon overcrowding as a recommendation to do heroic deeds in tree-felling, that there should be just as much consideration devoted to the question of removing a tree as of establishing one. Where trees are obviously going to ruin through overcrowding, apply the axe without hesitation. But whenever the question arises of removing an isolated tree, from whatever cause, take care to survey it from every point of the compass with due deliberation before a blow is struck, and consider the gap which will be left by its removal.

The cone-bearing trees, or Conifers, as they are called collectively, form a section of great importance. Many are evergreen, and of

beautiful form, while they embrace considerable diversity of foliage, both in respect to form and hue. When planted in suitable soil, and intelligently managed, they frequently attain to enormous dimensions, while preserving an admirable grace and distinctiveness.

The *Abies*, or Silver Firs, comprise several of our most beautiful Conifers, such as the species *Cephalonica*, *concolor*, and *Nordmanniana*, and the variety *nobilis glauca*.

Araucaria imbricata, the Monkey Puzzle, stands alone in character. If opinions differ as to its beauty they cannot very well do so over its distinctiveness.

The Cedars include such well-known trees as the Cedar of Lebanon and the Deodar. *Cedrus Atlantica* and the variety *glauca* are more generally useful garden trees.

The Japan Cedar, *Cryptomeria Japonica*, is a beautiful tree when it attains size, which it does not usually do unless in a rich and sheltered position. It is much used as a small ornamental shrub. There are several charming varieties of it.

The Cypresses (*Cupressus*) give us some exceedingly beautiful trees, which are very valuable while in a small state. Mention may be made of *Lawsoniana* and its varieties, such as *aurea* and *erecta viridis*; *obtusa* (or *Retinispora obtusa*) and its varieties *aurea* and *nana aurea*; and *pisifera* (or *Retinispora pisifera*) and

its varieties *plumosa*, *plumosa aurea*, and *squarrosa*. All of these are good.

Ginkgo biloba (or *Salisburia adiantifolia*), the Maidenhair Tree, has both distinctiveness and beauty to recommend it. It is not, however, evergreen.

The Junipers (*Juniperus*) are valuable both in a small and a large state. The species *Chinensis* and its varieties *aurea* and *glauca* give us three good small trees. *Sabina* is a dwarf tree, and its varieties *procumbens* and *prostrata* are still smaller. *Virginiana*, the Red Cedar, has attracted a good deal of attention in recent years, and, with its varieties, forms a useful group.

The Larch, *Larix Europaea*, is the most largely grown of all Conifers in this country, on account of its great economic value. Easily raised from seed, a very rapid grower, and of upright habit, it speedily gives a supply of long, straight, strong timber. It is, however, well worth a place in the garden, on account of the tender green of its young foliage in spring. The Japanese Larch, *leptolepis*, is rapidly coming into favour.

Libocedrus decurrens is almost as distinct, in its way, as the Monkey Puzzle, and is undoubtedly a very effective tree. There are some excellent specimens in the gardens at Orton Hall, near Peterborough, which have been raised from seed in a generation.

Among the Piceas, or Spruce Firs, we find

several ornamental Conifers, such as *Morinda*, or *Smithiana*, as it is often called in the trade lists, *pungens*, and the variety of the latter known as *glauca*. The common Spruce, *Picea excelsa*, is useful, and it has several dwarf varieties, notably *pygmaea*, which is a good deal used in gardens.

The Pines (*Pinus*) give us some of our most familiar Conifers. The Scotch Fir, *sylvestris*; and the Austrian Pine, *Austriaca*, are two cases in point. In addition there are the Corsican Pine, *Laricio*; the Stone Pine, *Strobus*; and *ponderosa*. There are varieties of most of these. Most of the Pines thrive in poor soil, but being, as a class, somewhat sombre in appearance, they must not be planted too freely.

The Plum Yew, *Prumnopitys elegans*, is not a very well-known Conifer, but it is graceful, and well worth planting.

The Douglas Fir, *Pseudotsuga Douglasii*, or *Abies Douglasii*, as it is often called by the trade, is a handsome Conifer.

The Umbrella Pine, *Sciadopitys verticillata*, is a unique and interesting tree, not often seen.

Sequoia, or *Wellingtonia*, *gigantea* is one of our finest Conifers. Noble examples of this beautiful tree are to be found in many gardens. Mention may be made of the two specimens planted by their Majesties King Edward VII. and Queen Alexandra while Prince and Princess of Wales at Strathfieldsaye, one of the seats of the

Duke of Wellington. There is a very fine avenue of *Wellingtonias* at Orton Hall. The species *sempervirens* (Red Wood) is not so well known as *gigantea*, but it makes a magnificent tree.

The Yews are, of course, familiar. The common Yew, *Taxus baccata*, is used a good deal as a hedge plant. This is safe in gardens, but not in fields, for it is poisonous, and cases of horses being killed through eating it are by no means unknown. Yew-planters must take into account the slow growth of the plant. Many of the varieties are much more valuable than the common Yew, and of these may be named *adpressa*, *Dovastoni aurea*, *fastigiata* (Irish Yew), and *fructu-lutea* (yellow fruited).

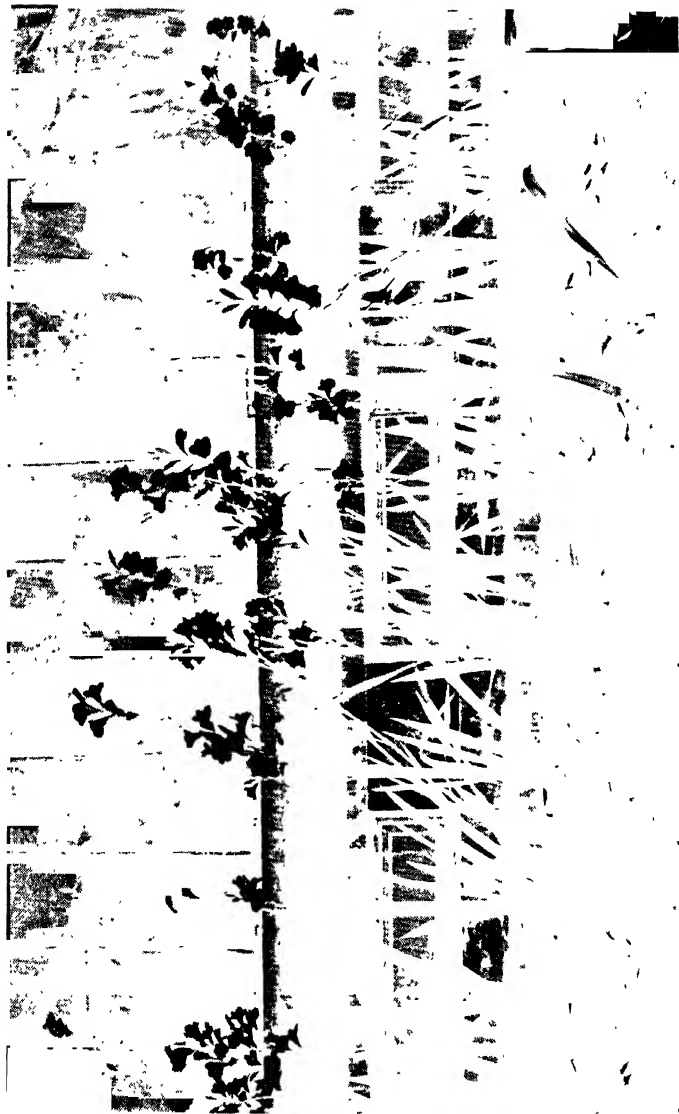
The *Arbor-Vitæ*s (Thuyas) are used both as hedge and specimen plants. The American *Arbor-Vitæ*, *Occidentalis*, is the most familiar, but *Japonica* and *Orientalis* are also well known. One of the best of the Thuyas is the Japanese *dolabrata*, which makes a very handsome small specimen.

The Hemlock Spruce, *Tsuga Canadensis*, is a familiar Conifer, and there are several varieties of it, notably *albo-spica*, *gracilis*, and *nana*. *Mertensiana* is often sold under the name of *Abies Mertensiana*. *Pattoniana* and *Sieboldii* are two other noteworthy Tsugas.

While the foregoing remarks do not embrace every Conifer that is worth growing, they com-

prise most of the finest, and a selection from the different species and varieties named will add beauty, grace, and interest to the garden.

In our fifth chapter we agreed that although we might use common shrubs, such as Aucubas and Hollies, for screens and backgrounds, we would try and find some better material for more prominent positions. Happily it awaits us in abundance. We can get shrubs and trees beautiful mainly for their foliage, and others valuable for their flowers. We can get evergreen, and we can get deciduous. We can have beauty all the year by choosing such valuable things as *Berberis Darwinii* and *stenophylla*, the Snow-drop Tree (*Halesia tetraptera*), the yellow and crimson Broom (*Cytisus Andréanus*), selected *Rhododendrons* (see p. 32) and mollis Azaleas, silver-variegated Maple (*Acer Negundo variegata*), Tree of Heaven (*Ailantus glandulosa*), good Almonds, Plums and Peaches, such as *Prunus Davidiana*, *P. Persica Clara Meyer*, *P. triloba flore pleno*, *P. Pissardii*, and *P. pseudo-cerasus James H. Veitch*; *Buddleia globosa*, the splendid Dogwood called *Cornus albus Späthii*, such beautiful Thorns as *Crataegus Oxyacantha punicea flore pleno* (Paul's Double Scarlet) and *C. coccinea*; Scotch Laburnums (*Cytisus Alpinum*), the Meze-reon (*Daphne Mezereum*), *Deutzia crenata flore pleno*, *Forsythia suspensa*, Guelder Rose (*Viburnum Opulus sterile*), *Kerria Japonica flore pleno*,



W. TSONIAS IN A SHELTERED OUTSIDE BORDER AT KEW. (See page 80)



A SPLENDID CLUMP OF MALLOW (LAVATERA). (See page 85.)

Lilacs like Marie Legraye and Charles X., perhaps also the Japanese Syringa Japonica ; the Tulip Tree (*Liriodendron tulipifera*), *Magnolia grandiflora* and *M. stellata*, the grand Mock Orange called *Philadelphus grandiflorus*, fine Crabs like *Pyrus Malus floribunda*, P.M. *Scheideckeri*, and P.M. *spectabilis* ; the Sumach (*Rhus Cotinus*), Flowering Currants, such as *Ribes aureum* and *R. sanguineum* ; Robinias, such as *Neo-Mexicana* and *Decaisneana* ; the white Californian Poppy, *Romneya Coulteri* ; Golden and Silver Elders (*Sambucus nigra* varieties), many *Spiræas*, such as *Aruncus*, *Filipendula flore pleno*, *Japonica* *Anthony Waterer*, *palmata*, and *Thunbergi* ; the Snowberry (*Symphoricarpus racemosus*), and *Weigelas* (*Diervillas*), of which *Eva Rathké* is one of the best. But to continue the enumeration would be tiresome ; let us put some of the best trees and shrubs into the convenient form of tables.

Purple-leaved Trees.

Dark purple Beech (*Fagus atropurpurea*).

Purple Plum (*Prunus Pisardii*).

Dark purple Sycamore (*Acer Pseudo-platanus atropurpureum*).

Golden-leaved Trees.

Yellow Elm (*Ulmus campestris* *Louis van Houtte*).

Yellow Alder (*Alnus glutinosa aurea*).

Yellow Maple (*Acer Negundo Californica aurea*).

Silver-leaved Trees.

White Poplar variety (*Populus alba nivea*).

Golden-variegated Trees.

Golden Variegated Maple (*Acer Negundo aureo-variegatum*).

In autumn effect is got from the berries of Thorns, Briers, Snowberry, and other things, and from foliage.

Never stint a garden of shrubs. If the first cost is felt somewhat, derive consolation from the reflection that the annual expense of cultivation will be small. Give them deeply-worked, fertile soil, to encourage free growth. Straggling wood may be curtailed, and crowded branches thinned out, but otherwise prune lightly. In the case of spring bloomers, cut in the shoots which have flowered directly after the blossoming, but do not afterwards prune the fresh wood, as it is on this that the next season's flowers will form. Prune late bloomers in winter, and do not cut the new growth which follows in spring, as it will bear the next crop of flowers.



THE WEeping PAGODA TREE, *SOPHORA JAPONICA PENDULA*. (See page 93.)



A FINE SPECIMEN OF THE MAIDENHAIR TREE, GINKGO BILOBA. (See page 95.)

CHAPTER XIII,

ON WATER GARDENS.

SEE a Water Lily garden on a day in late spring, when the water has been drained away, and the plants removed for division. The pond is a slimy, slippery expanse of dark ooze, deepening to a few inches of water here and there. Labourers in huge boots wallow heavily in the mire. Great masses of brown, dank, forbidding stems lie about. In is an uncommon sight, yet one which, by a curious coincidence, the author saw on two successive days when visiting the famous gardens at Gunnersbury House, Acton, and Aldenham House, Elstree. It is a little difficult to imagine, in such circumstances, the aspect of the ponds on a summer day, when the air is full of heat haze, the water, sparkling where exposed under a burning sun, is cushioned over with great, thick, green leaves, and starred with flowers. Yet it is in gardens such as these, where the plants are grown by skilled men, and are cultivated as carefully as a specialist cultivates his Chrysanthemums, that Water Lilies give of their best.

And what a best it is! Who that has seen the Gunnersbury and Aldenham Nymphaeas in the height of their beauty can do other than gaze in admiration on the huge flowers of purest white, brilliant rose, and radiant blue! Resting on the bosom of the cool water, with their half-submerged carpet of shimmering leaves, and the quivering shadows of their sturdy stems drooping to the bottom, they form a most alluring picture of tranquil loveliness.

Happily, the beautiful Water Lilies will thrive in much more circumscribed surroundings than those which they enjoy in the gardens of wealthy flower-lovers. The small pool in the home garden may have them. They will even enjoy life, and reward the grower, in tubs set in some cool spot, with the roots secure from hard winter frosts.

The specially prepared pond in the large garden will perhaps have cemented banks, the sides of which are studded with "saucers" formed by ridged rings of cement, in which the plants are established. But in smaller places a less elaborate plan may be necessary. A series of old baskets may be secured, filled with good loamy soil (manure may be omitted as it tends to foul the water), weighted with a heavy stone or two, and sunk to the bottom with the plants in them. The baskets rot away while the plants are establishing themselves. This may be done up to the middle

of May. From 1 foot to 3 feet is a sufficient depth of water for the beautiful hybrids, although the native Water Lily, *Nymphaea alba*, is frequently found at a far greater depth in the lakes of many country houses. If the plants do not grow so luxuriantly, and produce such magnificent flowers, in the mud of a pond bottom as in the special compost of a cemented pond, there is the advantage that they do not need so much attention.

Flower-lovers who have no ponds may grow their Water Lilies in a brick or cemented tank. The author has seen several collections of great interest so grown, and on more than one occasion the talented Gunnersbury gardener has exhibited them in a tank. They are, of course, quite under the grower's command, and may be established in some cool and otherwise appropriate position near the house. With occasional division and soil renewal tank-grown *Nymphaeas* will flourish for many years.

A still more modest yet most pleasing and enjoyable plan is to grow them in tubs. The author has grown a small but interesting collection by sawing a paraffin cask through the middle, charring the two halves with lit shavings, embedding them to the brim in grass, putting a few inches of soil in the bottom, and filling them three parts full of water. The smaller forms, such as *Laydekeri* and *odorata*, should be chosen.

Pond-grown Lilies are subject to attack from voles, which must be kept under if serious loss is to be avoided.

Propagation is easily effected by dividing the crowns, taking care to see that each division has at least one bud.

There is a splendid choice of hardy Nymphaeas among the Laydekeri, Marliacea, and other hybrids. Ellisiana may be noted as a good red, and James Brydon as a crimson. Laydekeri rosea is a charming pink. Marliacea albida, white ; and Marliacea chromatella, yellow, with marbled leaves, are two of the finest hybrids associated with the name of the famous raiser, Monsieur Latour-Marliac. Odorata sulphurea gigantea is another good yellow. William Doogue is a splendid red. Tetragona (pygmaea), white, may be noted as a pretty small-growing species suitable for a tub.

The Nymphaeas, although the queen of water plants, do not monopolise all the beautiful kinds. Nuphar luteum is a good hardy aquatic. Alisma Plantago (Water Plantain) is also worth growing. Aponogeton distachyon, the Water Hawthorn, is very pretty and deliciously scented. Hottonia palustris, the Water Violet, white, with yellow eye, is another gem. Stratiotes aloides, the Water Soldier, is interesting.

Acorus Calamus, Butomus umbellatus, Menyanthes trifoliata (Bog Bean), Pontederia cordata,



RHODODENDRON PINK PEARL. (See page 32.)



THE JAPANESE LILAC, SYRINGA JAPONICA. (See page 99.)

and *Sagittaria sagittifolia* (Arrowhead), are non-floaters that thrive in or close to water.

A word may be devoted to plants which grow well at the margin of water. The noblest of these is the magnificent *Iris laevigata* (Kaempferi), of which there are so many splendid varieties. *Iris Pseudacorus* is also worth growing, as is *Parnassia palustris* (Grass of Parnassus). *Cardamine Pratensis flore pleno*, the double Lady's Smock, is a valuable plant, that grows remarkably in the Royal Horticultural Society's garden at Wisley. *Caltha palustris* and its varieties must be mentioned. *Typha latifolia*, the Reed Mace, may well be chosen on account of its distinct appearance. Bamboos like the margin of water, if the position is not exposed to hard frosts and cold winds. Finally, it should be remembered that the lovely *Primulas Japonica* and *rosea* never do so well as near, but not in, water.

CHAPTER XIV.

ON THE HOUSE BEAUTIFUL.

WITH the wealth of material available for beautifying houses, it is truly sad to see so many homes a mere mass of coarse, sombre Ivy, or lumbered with the ugly, sprawling growths of the common Virginian Creeper. The latter is a vegetable pest of the first magnitude, impoverishing the soil, suffocating really good but less aggressive plants, and harbouring multitudes of birds. It is true that it is bright for a week or two in autumn, but the leaves begin to fall almost as fast as they change colour, and the plant is bare for the greater part of the year. The common Ivy is a shade less objectionable, but in view of the fact that there are dozens of Ivies far better in every way it must stand condemned.

The principal reason why these wretched plants are allowed to spoil the appearance of houses is that they make a covering quickly. It is a bad reason. If it were accepted we might as well clap a frame of green, suburban trellis-work on the house at once ; it would be no uglier than

the Virginian Creeper, and not half such a nuisance in other ways. But the steady covering of a house with beautiful creepers is a pleasant process to watch. The interest is "long drawn out." To hurry it is a mistake, and to hide a handsome house in any rubbishy greenery available when there are plenty of beautiful plants at command is a blunder.

Assuming that an evergreen foliage covering is wanted, we may by all means turn to Ivies, but instead of choosing the common green let us select among such charming forms as *variegata*, *rhombea*, *marmorata*, and *Donerailensis*. They will grow slowly, but they will always be beautiful. If a Virginian Creeper is wanted, choose *Ampelopsis Veitchii*, which is self-supporting, clings closely, and makes none of the abominable tangle of growth which marks the common sort. Or plant one of the splendid Vines, *Vitis Coignetiae* and *V. vinifera purpurea*.

It is a pity, however, to exclude good flowering plants, inasmuch as a good selection will add a great charm to the home for a good many weeks. Such favourites as Roses, Clematises, Honeysuckles, and Jasmines, might be represented, in spite of the fact that they are not evergreen. Let us glance at the various aspects of the house, and note material for each.

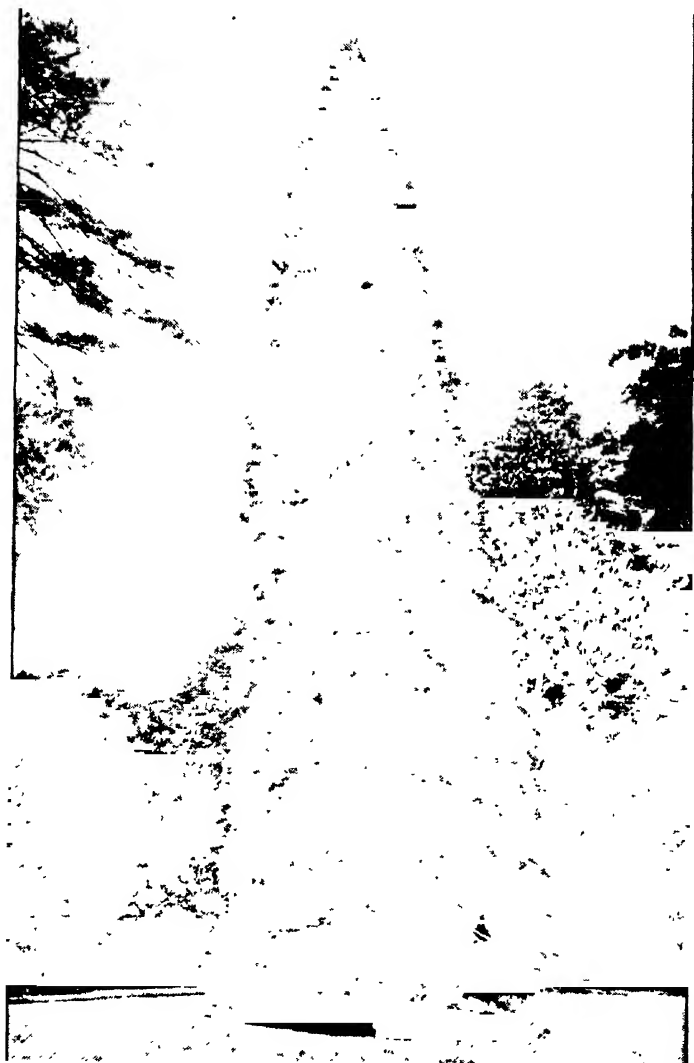
The south wall ought to be the easiest to deal with, because, being warm, it suits a great many

plants. As a matter of fact, south walls often cause a great deal of trouble, for the reason that people think the aspect is everything, and accordingly put plants out in any sort of soil and at any period of the year. Thus, Clematises, which loathe poor, dry soil, are often planted in a weird mixture of gravel sweepings in May, to be summarily scorched up and killed. Borders at the foot of south and west walls ought to be particularly well prepared. Anything short of 2 feet of well-manured soil is unsafe. Moreover, early planting ought to be practised, so that the plants may have a chance of becoming well rooted before the hot weather comes.

Among Roses for the south wall, Reine Marie Henriette, with its beautiful, deep, rosy red, richly scented flowers, claims attention. It will give at least two heavy crops of flowers a year in a good soil, and a sprinkling of buds between times. It is not a bad plan to take up long rods, and prune for flowering wood around the bedroom windows, covering the lower part of the wall with a good Honeysuckle (such as *Lonicera flexuosa*), or *Cydonia Japonica*, or *Kerria Japonica* flore pleno. Three strong rods of the Rose will support a considerable spread of flowering wood above, and be in no way inconvenienced by a dwarf creeper below, always provided that the soil is good. Any of the Clematises named in another chapter could be grown on the south



ROYAL TREES—A WELLINGTONIA PLANTED BY HER MAJESTY THE QUEEN
AT STRATHFIELDSAYE IN 1875 HEIGHT, 60 FEET. (See page 96)



ROYAL TREES—A WELLINGTONIA PLANTED BY HIS MAJESTY THE KING
AT STRATHFIELDSAYE IN 1875. HEIGHT, 63 FEET. (*See page 96.*)

wall, and so could *Wistaria Sinensis*, or the Passion Flowers, *Passiflora caerulea*, blue; and Constance Elliott, white. Ivy-leaved *Geraniums* would be beautiful in summer. The same plants will do on the west wall, consequently the material chosen may be divided between the two aspects.

The east wall will, of course, be colder, but it need not go bare. The dainty white Mountain Clematis will often thrive on a wall facing due east. Amongst Roses, William Allen Richardson and Gloire de Dijon are available. The beautiful Thorn *Crataegus Pyracantha Lalandi* ought not to be forgotten, as its orange-coloured berries are very cheerful. *Cydonia Japonica* and the Yellow Winter Jasmine, *Jasminum nudiflorum*, are also at disposal.

The north wall is not too easy to grapple with, owing to its sunlessness. Here, one of the better of the green Ivies may be put, such as *Raegneriana*. The *Crataegus* may thrive, and the author knows of a north wall the lower part of which is well covered with the dainty Roses *Homère* and *Aimée Vibert*.

If there be a porch it also must have attention. The pretty Rose *Félicité Perpétue* may be planted against it, or a selected Clematis, or a Passion Flower. Of annual creepers, or plants that may be treated as such, Canary Creeper, *Cobaea scandens*, *Convolvulus*, and *Eccremocarpus*

scaber may be named. There is no reason why the border which contains the roots of the wall plants should not be planted with dwarf things such as Primroses, Polyanthuses, Wallflowers, and Portulacas, so long as it is a large one, the soil deeply cultivated, and annual manuring practised.

Window boxes play an important part in house decoration in Suburbia, where capacious, creeper-supporting borders are often difficult to provide. The country house will have less need of them, and if well covered with good climbers it will require no further embellishment. Often a good effect is spoiled by the addition of an over-gay box. But window boxes have their uses, and if the fronts are draped with Creeping Jenny, Ivy-leaved Geraniums, or Tradescantia they are not offensive. It shows a paucity of ideas to merely fill the boxes with Geraniums and Marguerites in summer. Fuchsias are much quieter, and equally as pretty. The Butterfly Flowers (Schizanthuses), which are easily raised from seed, are also light, graceful, and pleasing. Given good soil, and a not too hot position, tuberous Begonias will thrive, and when they do nothing to equal them can be got.

Hanging baskets on porches, and specimen plants on terrace walls and window ledges, will also brighten up house fronts.

CHAPTER XV.

ON PERGOLAS.

A PERGOLA, or series of connected supports, is a charming adornment to a garden when well made and adequately furnished. It may range in length from 20 or 30 feet to 150 or 200 feet, according to the size of the garden. It may also vary as to material. The magnificent pergola at Harlaxton Hall, in Lincolnshire, is built entirely of stone; the equally beautiful one at Overstrand, Cromer, is constructed of square brick pillars, connected by massive boles of timber; but the vast majority of pergolas are constructed entirely of wood.

A pergola with a broad grass walk beneath it should be one of the most delightful resorts in summer. It will give that delicious coolness, that play of light and shade, which are so refreshing in hot weather. There is no necessity to curve it; rather should it be straight, so that a clear vista of chequered shadow and dangling foliage may be obtained. It may end in an opening which reveals a beautiful piece

of landscape, or in a rustic corner, with a summer-house or a shaded seat.

A pergola should not be either a low or a narrow structure. Seven feet of width, and seven feet of height, should be provided. Where poles are scarce there is a natural temptation to reduce in both directions, but it should be resisted. A flower gardener is always at liberty to tell himself that he can do without a pergola ; he should never permit himself to contemplate a mean one.

A dignified and harmonious effect is produced if the main uprights are of Oak, some 6 inches in thickness near the ground. The bark may be left on if desired, but it should be removed from the part which is to be buried, and this should be well tarred, pickled in cold creosote, or charred. Durable as Oak is, it needs some protection where it is in constant contact with damp soil. The cost of such supports may vary from sixpence to two shillings each. If more perishable timber is employed the necessity for a preservative becomes, of course, much greater. The cross and top-pieces may be lighter, and they need no dressing, consequently the cost for them is proportionately far less. Even so, we have got to look the pergola fairly in the face, and recognise that it is not going to be put up for the cost of a simple arch.

The cross pieces may be nailed, spiked, or

lashed with wire to the uprights, but in any case the whole structure should be firm and rigidly self-supporting. If there is such instability as to permit of considerable swaying in heavy winds, the plants which the pergola supports will not have a fair chance of thriving.

A well-made border should skirt the walk. We shall not only require twining plants for the uprights, but some dwarf flowers to grow between them, therefore the soil must be deeply dug and manured. The twiners in particular will want plenty of food, and to stint them would be folly. The ground should be prepared in autumn and winter, so that planting can be done quite early in the spring. This is a great advantage, as it insures the plants getting well established before hot, dry weather comes. The following plants will be handsome ornaments of pergolas if well grown :

Akebia quinata.—A pretty, perfumed, but not too hardy twiner, with singular purplish brown flowers which spring from the axils of the leaves.

Calystegia hederacea (*pubescens*).—A beautiful plant of the *Convolvulus* order, with double rose flowers. This and other Bindweeds need restrictive treatment at the root, or they soon become a nuisance.

Ceanothus azureus Gloire de Versailles.—A charming light blue climber, frequently used for house walls. It blooms profusely in early summer.

Chimonanthus fragrans (Allspice).—A vigorous shrub, which produces its singular, aromatic, yellow and brown flowers

in winter. It is, perhaps, rather more a wall than a pergola plant, being shrubby in habit, but it may be grown on a pergola when wall space is not available.

Clematises.—This beautiful genus gives us a splendid array of material. *C. montana*, the white Mountain Clematis, the rich, violet-blue *Jackmanii* and its white variety, together with those named in another chapter, may all be drawn upon.

Eccremocarpus scaber.—A summer bloomer, with cheerful orange flowers. Many treat it as a half-hardy annual, raising it early every year in heat. As it is not thoroughly hardy it is well to know that it can be so readily propagated.

Kerria Japonica flore pleno.—This, which is frequently used as a wall shrub, and is much admired when full of its bright yellow balls of bloom, may be pressed into service.

Lonicera (Honeysuckle).—The lover of sweet flowers will certainly want to include one or two of these dear old favourites. He may lean to the native Woodbine, *L. Periclymenum*, and if so there is no reason why his wish should not be gratified. He should, however, also try *L. Japonica flexuosa*, which is deliciously scented, and also the netted-leaved variety *aureo-reticulata*. For winter there is *L. fragrantissima*.

Passiflora (Passion Flower).—This naturally tempts us. Both *caerulea* and its white form, *Constance Elliott*, are beautiful, but they are not thoroughly hardy.

Periploca Graeca.—A pretty climber, with brown and green flowers, borne in July. It is worth including where a collection of plants is being made.

Roses.—An indispensable class, which has already been discussed at length. Nearly all arch and pillar Roses are good for pergolas.

Tropaeolum.—This genus gives us several brilliant plants. *Aduncum* (*Canariense*), the Canary Creeper, which is



A BED OF KALMIA GLAUCA. (See page 101.)



THE GOLDEN BELL, FORSYTHIA SUSPensa. (See pages 98, 101)

generally treated as a half-hardy annual, is well known, and so is the hardy annual *majus* (*Nasturtium*). *Speciosum* is a most brilliant plant, but only thrives in moist, cool localities.

Vitis (Vine).—Several members of this valuable genus are grown for the beauty of their leaves, notably *Coignetiae* and *inconstans* (*Ampelopsis Veitchii*—Veitch's Virginian Creeper), both of which colour beautifully in autumn. On the whole, they are more suitable for arbours and walls than pergolas.

Wistaria Chinensis.—A very beautiful old rambler, with long bunches of mauve flowers in early summer. It is really too well known to need description. It is, unfortunately, a painfully slow grower while young.

It will be seen that material is in no way limited. Many plants of great beauty, and embracing considerable diversity, are at the service of whoever wishes to add a pergola to the attractions of his garden.

CHAPTER XVI.

ON WALL GARDENS.

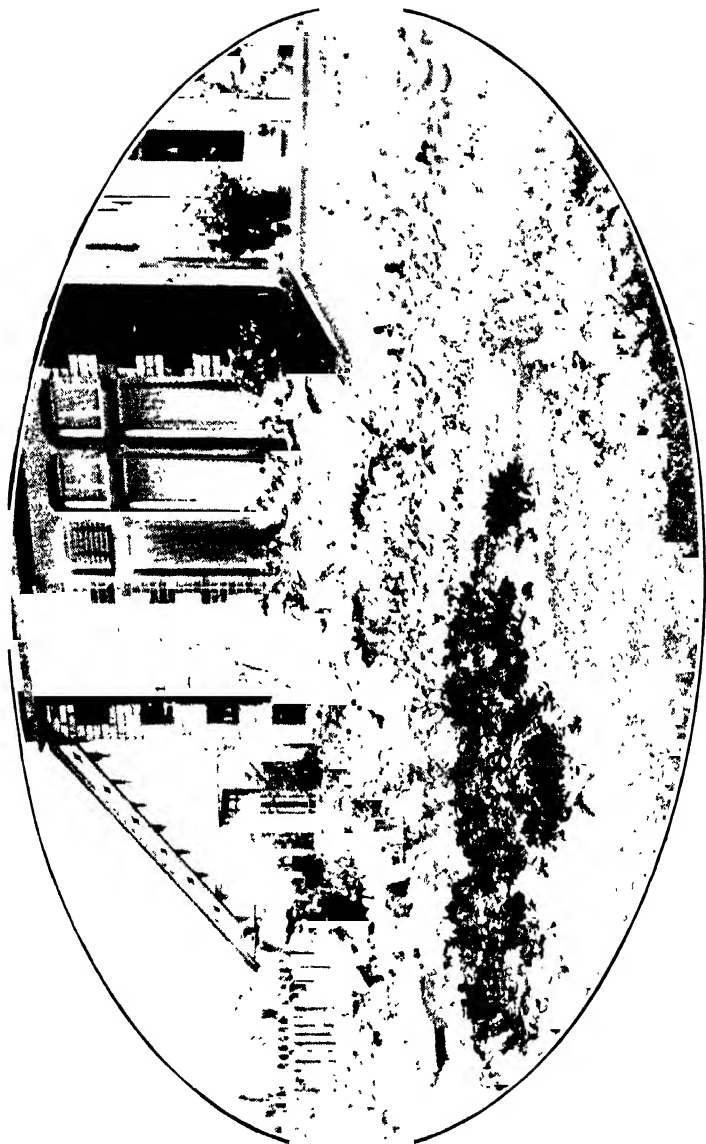
THE suburban flower lover often makes a crude attempt at wall gardening by driving hooks into the wall of his dwelling, and dangling therefrom wire baskets filled with plants. Since sympathy must be extended to all who endeavour to beautify their homes under difficulties, it would be wrong to throw ridicule on these attempts. Even if the plants thus enthroned are nothing more than a few rather startled-looking "Geraniums," smarting with acute self-consciousness, the fact remains that a search for the beautiful is struggling to find expression, albeit in a somewhat flamboyant manner.

There is, however, a phase of wall gardening which is better worthy of imitation, and that is the establishment of appropriate plants in the interstices, or actually on the face, of walls. Among many beautiful examples of this pleasant art the author has seen none more successful than those in the Trinity College Botanical Gardens, Dublin, established by the late Mr.



Photo: Pictorial Agency.

PRETTY COTTAGE FRONTS AT BOURNVILLE. (See page 122.)



A VILLA FRONT RELIEVED OF ITS BARENESS WITH PLANTS (See page 112.)

F. W. Burbidge. Many plants never look more thoroughly at home, and therefore more beautiful, than when clinging to a wall; and those in the case quoted were full of health and beauty.

The primary use for ordinary brick garden walls, such as those of kitchen gardens, is to support fruit trees, but there are often to be found in gardens rough retaining or bank-supporting walls which, now bare, could be planted with suitable flowers, and thereby rendered attractive.

There are two means by which the plants may obtain foothold. One is by forcing their roots into the joints, and the other by resting in specially made pockets. They would stand little chance of getting a firm footing on the smooth face of a well-pointed brick wall, but in the looser, less elaborately finished joints of a stone wall, such plants as Houseleeks can establish themselves quite securely. The pocket system is, of course, better, inasmuch as it permits of including plants which could not establish themselves on a wall face, and is as applicable to a brick as to a stone wall. The pockets are formed thus: first long spike nails are driven securely in between the joints. They must protrude far enough to partially support a series of selected stones. These are further secured by cementing them to the face of the wall. The combined sustaining force of the wall, spike nails, and cement, keeps the stones quite firm and secure.

A little soil may be placed in the hollow upper surface of the stones, and plants placed in position. The wall top may be covered by cementing stones along each edge, and placing soil and plants in the space thus formed.

Although a wall so treated has a somewhat "prepared" appearance at first, it is really no worse than a newly-planted rockery. The plants will spread fast, and soon completely cover it.

Among plants suitable for growing on walls, Houseleeks (*Sempervivums*), Sedums, and Saxifrages must rank high. They are close, clinging growers. The Sun Roses (*Helianthemums*) are rather straggly, but they are otherwise excellent plants. The dwarf, spring-flowering Phloxes of the *subulata* section should be used freely, as they do well and are remarkably pretty; among them may be mentioned *frondosa*, rosy red; *grandiflora*, pink, with crimson eye; Newry Seedling, lilac; and Vivid, rose. *Erinus Alpinus* is a good plant, and so is *Alyssum montanum*. *Alyssum saxatile*, the popular spring-blooming border or rockery plant, will also thrive, as well as Cheddar and other Pinks.

Several of the *Campanulas* come in extremely useful, notably *Portenschlagiana*, *Garganica*, and *isophylla*. Speaking broadly, the dwarf plants which thrive on a dry rockery will also do well on a wall, but those which like abundance of moisture cannot be expected to succeed so well.

Those who may wish to study the details of wall gardening more fully than it can be treated here would do well to refer to the illustrated article in Vol. I. of "Cassell's Popular Gardening," where a valuable series of illustrations is given.

Where plenty of stones are at command what is termed a "dry"—*i.e.* an unmortared—wall may be built up against a bank. It might be termed a perpendicular (or nearly perpendicular) rockery. Cornish workmen build up these dry walls with great skill and rapidity, and Nature speedily sets to work to cover them. The open spaces between the stones, which in the ordinary wall would be filled with mortar, are not capacious, but they afford room for a pinch of soil and a seed or two. Aubrietias and Arabises will cover square yards of such surfaces in a few years. Perennial Candytuft (*Iberis*) will also thrive. The Sandwort (*Arenaria Balearica*), Alpine Wall-flowers, and other familiar plants will grow with freedom. There is no lack of plants; what is wanted is the stone.

CHAPTER XVII.

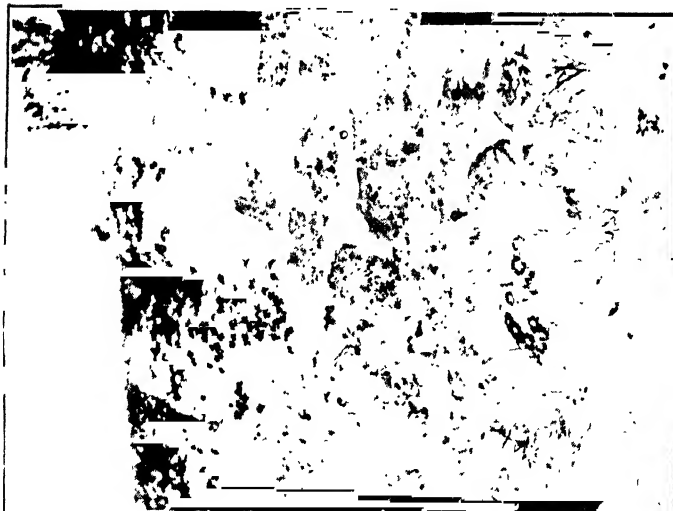
ON WILD GARDENS.

IN many gardens it happens that there is a certain area of ground which does not fall in with the general design. It is perhaps so rough, uneven, and shaded that cultivation on "full dress" lines presents serious difficulties. Of course, there is no condition which could not be overcome by the application of sufficient labour, skill, and capital. When a railway engineer comes to an obstacle that he cannot level he either cuts through it, climbs over it, or burrows under it. The one thing that he does not do is to give up his railway because of it. A garden-maker is not bound to either give up a piece of troublesome ground or carve at it with slow and costly labour. For him there is always a way round. He can let this be his Nature Garden—his bit of wild, and it is quite likely that he will get as much pleasure out of it as he will out of the fully cultivated parts.

It is not in large gardens alone that these rough, tree-shaded areas exist; they are often



FLOWERS IN A WALL IN CORNWALL (See page 121.)



DWARF PHLOXES ON A WALL. (See page 120.)



THE YELLOW CINQUEFOIL (POTENTILLA AMBIGUA) ON AN OPEN WALL.

found in small ones. But large or small, something has to be done with them. Here, if ever in gardening, is a case for joining hands with Nature, and, partly coaxing, partly coercing, improving on her handiwork.

The paths in the wild garden could not be, and should not be, neat, dressed paths of gravel or turf, which would entail a great deal of labour, and still be incongruous. In sandy or peaty districts the low, heathy growths will suffice for a footing, and practically all that is needed is to clear rambling branches away. The paths should be narrow and winding—losing themselves, so to say, in the tangled vegetation. In the case of wet, clayey land, some sort of made path must be provided, otherwise the garden would be impassable in wet weather. A couple of inches of unsifted ashes on a layer of broken clinkers or rubble will suffice. In wet or marshy spots a few large stones may be laid as steps.

It must not be supposed that because we are going to make a covenant with Nature in this matter we intend to tolerate a mass of weeds and ugly growths. A wild garden that is a mere waste of Cow Parsley and Crowfoot will not be satisfying. Hence it is that the first step, in the rough as in the cultivated area, may be the clearing away of noxious and objectionable growth, and some amount of shrub-thinning and tree-trimming. Then will come the introduction of

fresh plants. For the most part planting must be done in scattered, informal groups. Plants must grow as if they had originated in the places they occupy, not as if they had been put there.

The Foxglove is a valuable plant for the wild garden, and comes readily from far-flung, uncovered seed. Its tall spikes have a very good effect when rising here and there without rank or order. The Honesty, *Lunaria biennis*, loves to naturalise itself in partly shady places. It is more than tolerable when in bloom, but its main beauty lies in the transparent seed pods which clothe it in the autumn. Violets and Primroses will be charming in the spring. The common yellow Primrose attains to a size, both of plant and bloom, in damp clays that it never reaches in impoverished woodlands. A faintly coloured bloom is sometimes found—a sort of refugee from cultivation—but it is rare, and there is no reason why some of our coloured Primroses should not be naturalised.

The little *Hepatica* is never so happy in a cultivated border as in a home of its own under trees, and the same may be said of *Cyclamen Coum*, which has a lovely effect when naturalised on a bank. Snowdrops and Daffodils love the grass. The naturalisation of *Narcissi* has developed apace these latter years, in spite of some failures. Thin, gravelly, and chalky soils do not offer such promise of success as deep loams

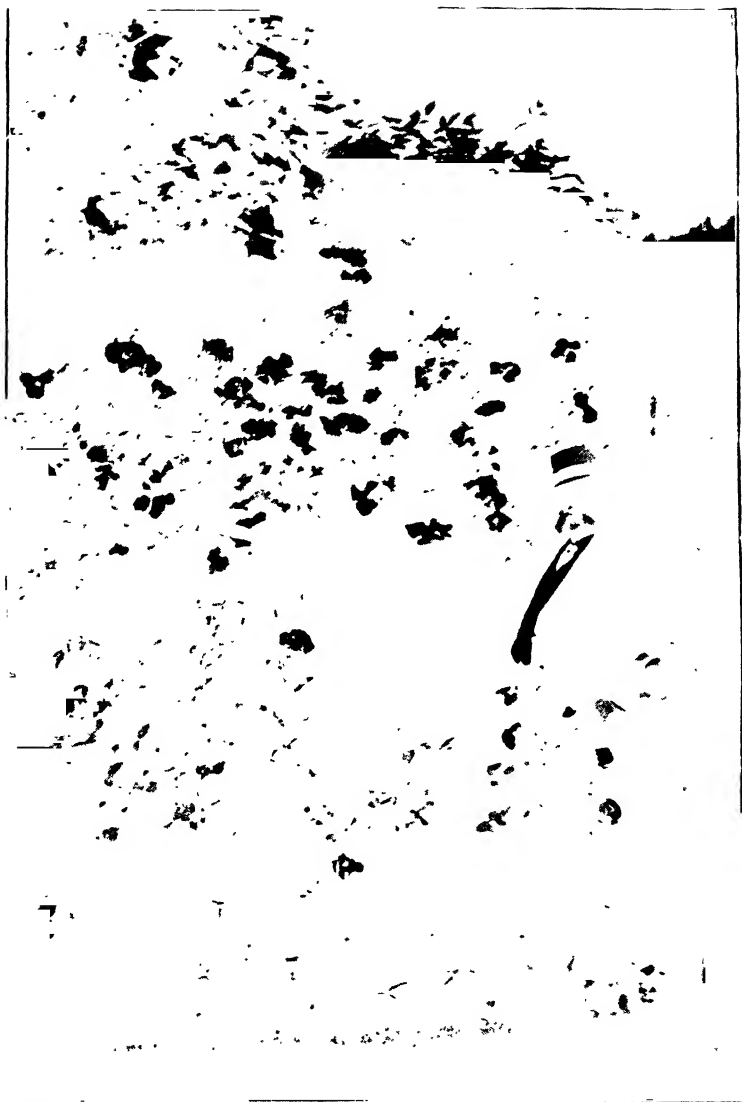


Photo : Mr. J. Dunlop, Cove, Dumbartonshire.

A GRAND PLANT OF THE CALIFORNIAN TREE POPPY. ROMNEYA COULTERI

(See pages 99, 101.)



Photo: Mr. A. C. Leney.

A SPLENDID PLANT OF *VIBURNUM PLICATUM* AT THE GARDEN HOUSE,
SALTWOOD, HYTHE. (*See page 101.*)

and clays. Daffodils luxuriate in heavy land, where their roots can strike down and find moisture. In such places they develop immense growing force. In turving a piece of ground where a colony of Van Sion had been established the author was interested in observing, not only that he had signally failed to extract all the bulbs, but that those which had been overlooked came through the thick turf as early as, and stronger than, plants in the bed which the turf surrounded.

The Winter Aconite is a little early bloomer which may be established under trees, and is very cheerful in the winter. The Dog's-tooth Violet, Lily of the Valley, and Poet's Narciss, may also be named. Amongst taller plants we have the Mulleins (*Verbascums*), Meadow Sweet (*Spiraea*), Canterbury Bells, Golden Rod (*Solidago*), Monkshood (*Aconitum*), Evening Primrose (*Oenothera*), Snapdragon, and Solomon's Seal.

Bold groups of good, selected plants will be better for the purpose in view than odd representatives of a great many kinds, but if more variety is wanted such things as Borage, Columbines, various hardy ferns, Heaths, Winter Heliotrope (*Petasites* or *Tussilago*), Sea Hollies (*Eryngiums*), Loosestrife (*Lythrum*), Lupins, Mallows, Meadow Saffron, Monkey Flowers (*Mimulus*), Ox-eye Daisy, Plantain Lily (*Funkia*), Rocket, Penzance Brier Roses, St. John's Wort (*Hypericum*), and Wood Anemone may be employed.

everything necessary for their welfare. They thrive best in a cool, prepared bed of loam, manure, and peat, with pieces of sandstone for neighbours. It should be near water, as ferns enjoy the humidity which is associated with pools and brooks. Under such conditions as those indicated, combined with shelter from cutting winds, two of the noblest of hardy ferns—the Royal, *Osmunda regalis* ; and the Ostrich, *Struthiopteris Germanica*—attain to majestic proportions, and become amongst the finest objects of the garden.

It has been mentioned that soft, diffused light is better for hardy ferns than dense shade, and it may be added that some ferns will grow in the sun if their roots are well established in a cool, prepared medium. It is not pretended that they will thrive on dry, poor, hot banks as will *Portulacas*, but it may be pleasing to some people to know that they need not despair of growing hardy ferns successfully because they cannot provide the ideal position.

In considering the various species from which to make a choice, attention may first be turned to the *Adiantums*, of which the native Maiden-hair, *A. Capillus-Veneris*, is one of the most familiar examples. It is hardy in the south of England. There are several beautiful varieties of it, which, however, are usually grown in cool houses, as they are not safe out of doors except in the most favoured places. The best

known is *imbricatum*, a really beautiful fern, but one of the least hardy. *Magnificum* and *Mariesi* are two other good forms. Another hardy *Adiantum* is *pedatum*, and this, too, is worth growing.

The *Aspleniums* give us some remarkably beautiful ferns, and inasmuch as the lovely Lady Fern and its many varieties, which were formerly called *Athyriums*, are now classed under *Asplenium*, the genus has gained greatly in importance. The Black Spleenwort, *Asplenium Adiantum-nigrum*, is a good plant, and still better is its crested form, *grandiceps*. *A. Ceterach*, formerly called *Ceterach officinarum*, is the well-known Scale Fern. Among its varieties *ramoso-cristatum* may be mentioned.

The Lady Fern has a large and beautiful bevy of varieties in its train, amongst which *Barnesii*, *crispum*, *dissectum*, *grandiceps*, *multifidum*, and *Victoriae* may be named as a select half-dozen. The type might certainly be grown with them, for it is an exceedingly graceful and desirable fern.

Passing on, we have two other good *Aspleniums* in *lanceolatum* and its variety *crispatum*. *A. Trichomanes*, the Maidenhair Spleenwort, and its two lovely varieties *cristatum* and *incisum*, are a valuable trio, but the two last are small and usually grown under glass except in warm localities.

Since the genus *Aspidium* now includes the

old genus *Polystichum* it cannot be overlooked. *A. acrostichoides* is good, and its varieties *grandiceps* and *incisum* are charming. *A. aculeatum*, the well-known Hard Shield Fern, is a popular plant, and two good varieties of it are *proliferum* and *vestitum*. *A. angulare*, the Soft Shield Fern, is perhaps even more familiar than its sister. There are many good varieties of this, the most popular being *proliferum*, which is largely grown in pots. Other good varieties are *Elworthii*, *Kitsoniae*, and *rotundatum*. *A. Lonchitis* is the distinct and admired Holly Fern.

The genus *Lastraea* has now been merged in *Nephrodium*, under which name botanists class the familiar Male Fern, *Filix-mas*. This gives *Nephrodium* special importance. Glancing at its hardy species in alphabetical order, we may first mention *N. aemulum*, the hay-scented Buckler Fern. It has varieties, of which *ramosum* is one of the best. *N. cristatum*, the Crested Shield or Buckler Fern, is a pretty species, but uncommon. It has several varieties. *N. dilatatum* (*Lastraea dilatata*) is classed by some authorities as a variety of *spinulosum*. It is a valuable fern, especially if considered in connection with its many beautiful varieties, such as *cristatum*, *Dumetorum*, *ramosum*, and *Stansfieldii*. *N. Filix-Mas* is, of course, a power in itself. It would be almost impossible to give a list of all the varieties of the famous Male Fern. There are



WATER LILIES AT MESSRS. DE ROTHSCHILD'S, GUNNERSBURY HOUSE, ACTON (See page 103.)



A PRETTY WATER GARDEN NOTE THE BAMBOOS ON THE MARGIN (See page 107)

many scores of them. *Barnesii* must be mentioned, as also must *grandiceps*, *Ingrami*, *magnificum*, *multicristatum*, *pumilum*, and *Schofieldii*, but these are only a few among many gems. *N. fragrans*, the Fragrant Wood Fern, is another hardy *Nephrodium* worth mentioning. *N. montanum*, the Mountain Buckler Fern, is good, and has several excellent varieties, such as *Barnesii* and *cristatum*. *N. rigidum* thrives on chalky soils. *N. spinulosum* is the Prickly Shield Fern, a well-known plant.

Osmunda regalis, the Royal Fern, is one of our noblest plants. It should always be tried, together, if possible, with one or other of its varieties, of which *gracilis*, *palustris*, and *purpurascens* may be mentioned.

Of the genus *Scolopendrium* the only really popular species is *vulgare*, the Hart's Tongue Fern, but this is quite enough to afford the fern lover food for study, inasmuch as there are several hundreds of varieties of it, many of them plants of exquisite beauty. Only a very few can be mentioned here. They are *acrocladon*, *Claphami*, *Coolingii*, *crispum*, *cristatum*, *fimbriatum*, *grandiceps*, *Kelwayi*, *laceratum*, *marginatum*, and *variegatum*. Some of these suns have sub-planets of their own, so that there is no lack of diversity.

Struthiopteris Germanica, or *Onoclea Germanica* as the botanists now call it, is the

magnificent Ostrich Fern, which on the margin of water often assumes stately proportions. It cannot be omitted from a selection of hardy ferns, but it is emphatically not a plant for a sunny bank or rockery. It loves a cool bottom, such as the verge of a pond.

Many lovers of hardy ferns like to grow a collection of them in a cool house, either in a specially prepared rock bed or in pots. This has its pleasures, but is outside the scope of the present work.

CHAPTER XIX.

ON GARDEN WALKS.

MODERN flower gardening has given the walk a new significance. It is no longer regarded as merely the medium by which transit is effected from one part of the garden to another, but as something pleasing and beguiling in itself. It must have its own borders, and thus play a specific part in enhancing the beauty of the garden. As will be seen in the chapter on edgings, walk and border may really be made to blend ; the association between them being then too intimate for any well-defined line of demarcation to be drawn.

While, however, the artist as well as the navvy has his part in the making of garden walks, it must be remembered that certain principles of construction are essential. A main walk should be well built up, to enable it to carry fairly heavy traffic. It should have 6 inches of rubble in the bottom, well rammed down on a firm base, and 3 inches of gravel on the top, the finer particles on the surface. The path

should rise from the edges to the centre, at the rate of 2 inches for every 4 feet. This will ensure water being carried to the sides, where grated take-away pipes will carry it to the 3-inch ground drains, laid in the ballast. A walk so made will serve for all ordinary garden work, and be available in all weathers. If regularly rolled it will have a neat appearance. In these days of cheap weed-killers there should be no trouble from weeds, as one application a year, or two at the most, will keep them under.

If there is much heavy traffic a more substantial basis is needed : cart and carriage traffic really demand something more than what is commonly called a "walk."

The width of the walk must be regulated by its use. A main walk may be 8 feet wide, for a side path 4 feet will suffice. Economic, if no other, considerations will dictate that walks shall not be made wider than is necessary. Where material has to be brought from a distance walk making is apt to become expensive. Moreover, a garden may be made ugly with too much gravel.

Asphalte cannot be recommended as strictly appropriate for a garden walk, although its use is not uncommon. It has a "towny" look at all times, and is apt to be smelly in hot weather. At the same time, it has an advantage over gravel (which it shares with concrete) in sharply sloped gardens, wherein gravel is often badly washed



"SNOWDROPS LOVE THE GRASS" (See page 124)



"PRIMROSES WILL BE CHARMING IN THE SPRING." (See page 124)



NARCISSUS POETICUS IN AN EVESHAM ORCHARD. (See page 126.)

down in heavy downpours of rain. A pathway made of large flagstones, the joints of which are left open so that dwarf plants may establish themselves, wears well, is good in wet weather, and when bordered with flowers has a pleasant, cool, old-world look about it.

The grass walk should be introduced wherever possible. Where there is cart or wheelbarrow traffic it is not suitable, but for ordinary flower garden walks it is much the most appropriate of all. What so beautiful a foil for flower borders! What so charming a base under pergolas or arches! The objection may be raised that grass walks are disagreeable, because damp in wet weather and when heavy dews prevail. This holds good to some extent, but when the grass is regularly mown and rolled it is not so serious. The further objection that grass paths are not satisfactory under trees, where the soil is impoverished by greedy roots, and where the shade is heavy, must be accepted; nevertheless, the grass walk remains important. It is easy to overdo gravel in a garden, but very difficult to overdo grass. Given gravel or any other non-vegetable walks, the aim must be to reduce them in area to the utmost possible extent, because they are only a convenience, like a spout or a toolshed. Given grass walks, the area may be increased to the utmost degree, consistently with the capacity for mowing, rolling, and trimming,

as they add to the beauty of the garden. A series of winding grass walks, with borders of flowers, and arches in places, will be far more varied and interesting than any square-cut, bed-and-gravel garden. Indeed, a very beautiful garden could be made of them without any beds at all.

It is surely more pleasant to wander from one pleasant, special spot in the garden to another, with "flowers, flowers all the way," fresh objects of interest meeting the eye at each turn, grass beneath one's feet, than to stand on an expanse of gravel and be dazzled—almost startled—by one large group of beds. In the one case pleasure comes in many sweet sips; in the other it is swallowed at a gulp.

CHAPTER XX.

ON EDGINGS.

AN edging may be described as the embroidery of a garden. It is not the thing itself, but it is that which imparts "finish."

A garden without edgings is apt to look crude and incomplete; provide edgings of an appropriate character, and the "rawness" melts insensibly away.

Tile edgings are much too common in gardens. It cannot be denied that they serve a practical purpose, and, mechanically considered, serve it well. But there their merits end. They are not at all cheap, they are liable to be chipped and to split, and they always have a harsh, metallic appearance.

Grass verges for walks, and plant edgings for beds and borders, are a thousand times more in keeping with the spirit of an artistic flower garden than tiles. Granted that they involve a little more trouble, the work they create nevertheless falls within the legitimate routine of a garden. It is not considerable, and it is well repaid.

The objection is frequently raised to "live" edgings that they harbour plant enemies. Box edgings offering shelter to slugs is a familiar quotation. The author has not observed that complaints about the depredations of slugs are less bitter in tile-edged than in Box-edged gardens. His experience of the slug is that he is a pest of far too varied parts to be disconcerted by the absence of Box or any other form of edging. The wise gardener accepts the slug as one of the trials which horticultural flesh is heir to, and instead of flying helplessly to tiles, thins the ranks of his enemy, and reduces him to impotence, by traps of brewers' grains, and liberal nocturnal applications of lime water.

As a matter of fact, there will not be any greater demand for Box than there will be for tiles if the principle is accepted that the best edging for walks, beds, and borders alike is fresh, green turf. This is not objectionable either on the ground of looking mechanical or of harbouring slugs. It is not without its drawbacks, admittedly, and it needs regular attention to keep it in perfect condition ; but it has an eminently fresh and natural appearance at all periods of the year, and that, from a garden point of view, is a supreme recommendation.

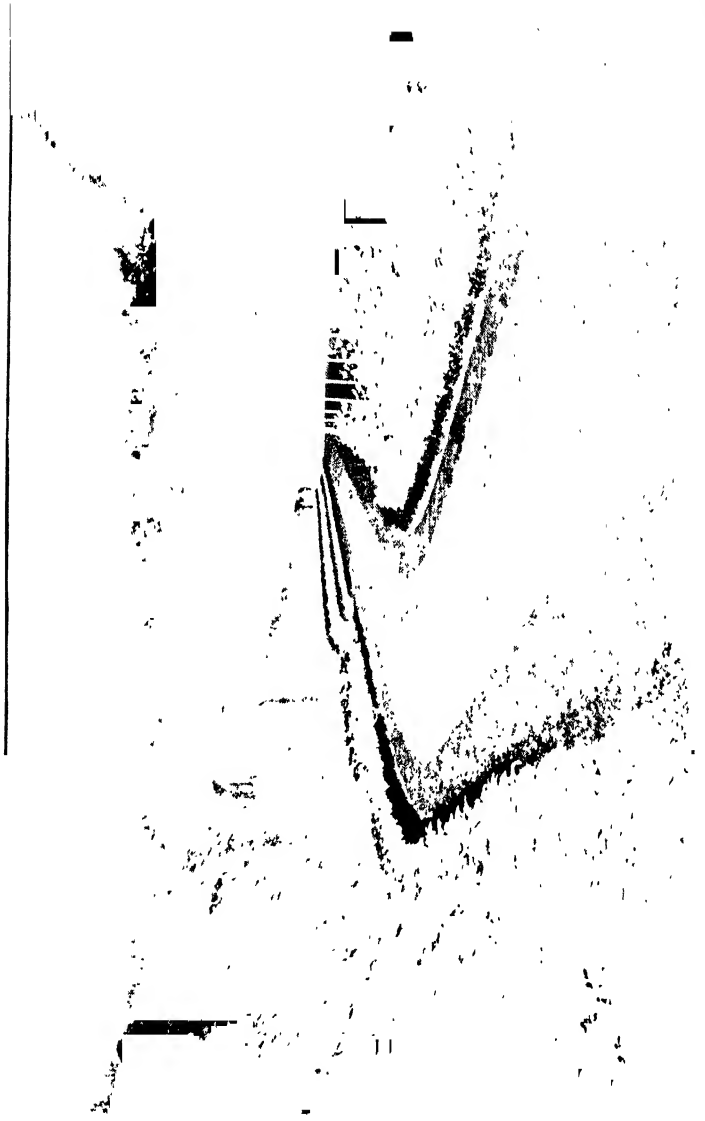
It may, however, be urged that in many gardens there are walks which are not, and cannot be, turf lined, and that a mechanical edging of



Photo. Mr. A. C. Lemay.

"THE ROYAL FERN . . . IS ONE OF OUR NOBLEST PLANTS" (See page 131.)

A SPLENDID SPECIMEN OF OSMUNDA REGALIS AT THE GARDEN HOUSE, SALTWOOD, HYTE.



GRAVEL, GRASS AND FLOWERS A WALK IN THE GROUNDS OF THE RT HON. SIR HENRY CAMPBELL-BANNERMAN
AT BELMONT CASTLE, MEIGLE, N.B. (See page 133)

some kind is essential. Accepting this under protest, the author would say briefly that the rope-twist is one of the most economical forms of tile edgings, and if firmly and truly set will give all the satisfaction that can be reasonably expected of its kind. If badly set it will be a perpetual nuisance and eyesore. A straight line, and a firm, level base, are essential.

In districts where hard stone can be procured at a moderate cost a durable and at the same time appropriate edging can be provided by associating it with dwarf plants. In effect, a sort of border rockery is made. Mention is made in another part of this work of the charming effects secured by Lord Battersea in his lovely garden near Cromer by the adoption of this system. A straight line of stone is not put in, with a straight line of plants behind it, but the borders have the waved line—the promontory and bay—of the ordinary rockery. This is not a cheap form of edging, in fact, it becomes expensive when the stone has to be brought from a distance, but it is a very beautiful one.

If a cheap, easily managed foliage edging is wanted there is no overlooking the claims of Box. It is amenable to clipping, and with two operations of this nature per year, one in spring and the other in early summer, will be neat and compact. Plant against a straight, firm trench edge early in March, and be sure to ram the soil

CHAPTER XXI.

ON SOME PRACTICAL MATTERS.

THE making and upkeep of a flower garden will cost more or less, not only in proportion to its size, but also in proportion to the degree in which the class of plant grown is specialised. It is the latter consideration—an all-important one—which makes it extremely difficult to calculate the cost of flower gardening.

If the reader should fail to appreciate the magnitude of the problem, let him compare the price of a new Dahlia—say five shillings—with that of a standard sort—say sixpence ; of a new Rose with an old one—perhaps five shillings against ninepence ; and so on with a great many other popular garden flowers. He will then realise that, in proportion as he is bent upon having in his garden the most modern varieties, or is satisfied with older ones as long as they are good, so will the cost of his garden be greater or less.

If this matter be left out of account there is less difficulty, and it may be well to consider the



"PLANT ONE OF THE SPLENDID VINES, VITIS COIGNETIAE. . ." (See page 109)



A CREEPER COVERED HOUSE SEEN THROUGH A
PERGOLA



A FINE IVY-LEAVED GERANIUM ON A HOUSE FRONT. (See
page 111.)

various items of expense connected with the making and maintaining of a beautiful garden under their various headings.

THE LANDSCAPE GARDENER.

The landscape gardener stands somewhat in the same relationship to the working gardener as the architect does to the builder. The one plans and supervises, the other executes. But it is common in gardening to find another factor in the form of a nurseryman, who, in consideration of the profit which he derives from supplying the trees, shrubs, and plants required, will draw up plans without extra fees—providing, of course, that the designs are not to be of a very elaborate character.

What shall the prospective garden maker do when he has procured the land for his garden? Shall he forthwith seek the best landscape gardener who is to be found, and commission him to provide designs? Yes, if he can afford it. The landscape gardener will provide plans only, or he will undertake the whole execution of the work, in each case at an agreed price. If he is a man of character and ability the garden maker will be absolutely safe in his hands. There will be neither incompetence nor jobbery.

If, however, economy is a great consideration, the consulting nurseryman may be called upon. It does not follow that the first little wayside

florist who puts in an appearance should be chosen. This class of man has often been a "gardener" in an obscure place, and, although perfectly competent to grow Cucumbers and bedding "Geraniums," knows no more about artistic gardening than a Yarmouth fisherman does. Without saying anything unkind about a type which doubtless possesses certain good qualities, it may be suggested that Messrs. Fresh-cut-Cucumbers and Wreaths-supplied had better be relegated to their proper sphere of usefulness whenever they appear on an eager quest for permission to muddle up a new garden.

There are reputable nurserymen in nearly every county who have a trade in shrubs and hardy flowers; and connected with them is a principal or confidential man who superintends what is called the "landscape department." These men often display a surprising aptitude for artistic work. They may ignore their aspirates as resolutely as Mr. Fresh-cut-Cucumbers himself; they will certainly always allude to the work in hand as "the job"; but it is quite likely that they will provide a very satisfactory design. This was not always the case. When the bedding system reigned supreme it paid a nurseryman better to propagate new Zonals than to run about the country laying out gardens. But in these days of hardy flower gardening the field has widened.

The nursery landscape man will give an inclusive estimate, if asked, for designs, material in the form of trees and plants, and labour. He will send down a foreman-in-charge, who will carry out the whole of the work with labour hired in the district. If the firm is an experienced one it will do the work well, down to the last drainpipe, the last yard of path, and the last square of turf.

One of the two foregoing courses will certainly commend itself to the business man, who, while desirous of having a garden, is not prepared to take a close personal interest in it. But what about the man to whom his garden is the first consideration—the flower lover pure and simple? Not for him the dictum of the finest landscape gardener who ever lived! Not for him the ideas, however good they may be, of the landscape nurseryman! He is going to plan and make his own garden. He is going to stamp his individuality upon it. As a man of common-sense, he is not going to rush into so great a task without preliminary study. By observation in other gardens, by reading, he will first acquire a thorough grasp of the main principles of the art of landscape gardening, and perhaps some hints on practical matters will help him.

GARDENERS, AND GARDEN LABOUR.

A person with a fair amount of spare time should have no difficulty in managing his own

garden if it is a small one—not exceeding half an acre in extent. In gardens of an acre and upwards regular assistance is likely to be required. But whether assistance is wanted or not, and if it is how much, will necessarily depend upon the character of the garden. A garden of an acre could be quite easily controlled if it were made up of a considerable area of grass, shrubberies, and herbaceous borders. The same area that included a kitchen garden, a tennis or croquet lawn, a number of flower beds, and two or three greenhouses, would provide enough work to fill all the time of an energetic man. A man an acre may be accepted as the proper allowance. And here a word may be said in reference to those places, the possession, generally, of small gentry with little money, less energy, and still less consideration for their fellow-creatures, where one hapless labourer is set the task of managing two or three acres of garden, an orchard, a poultry run, and a pony, and is then railed at because there is a weed on the drive, or a shortage of Asparagus, or the hens do not lay. We cannot accept them as gardens, or their owners as flower lovers.

In all gardens there must be one person responsible. It may be the owner, it may be the gardener—it cannot be both. The person who, employing a gardener or gardeners, nevertheless takes control of the garden, must, in justice,

assume also the full responsibility. The plan of accepting credit for everything that goes right, and repudiating blame for everything that goes wrong, is not only unjust, but unwise. It discourages and irritates the gardener; and it so confuses the issue between master and servant that even when the latter is in fault it is difficult to define or bring home his delinquency.

Generally speaking, a man who has held head gardener's places is difficult to control. Unless he is an exceptionally tactful man (and most gardeners are not distinguished for tact), he cannot be handled. If, therefore, gardeners are employed in a place where the owner is himself the head gardener, they had better be men who have not held head places. If a head gardener is to be kept, get a good man, pay him fairly, give him reasonable assistance, and trust him.

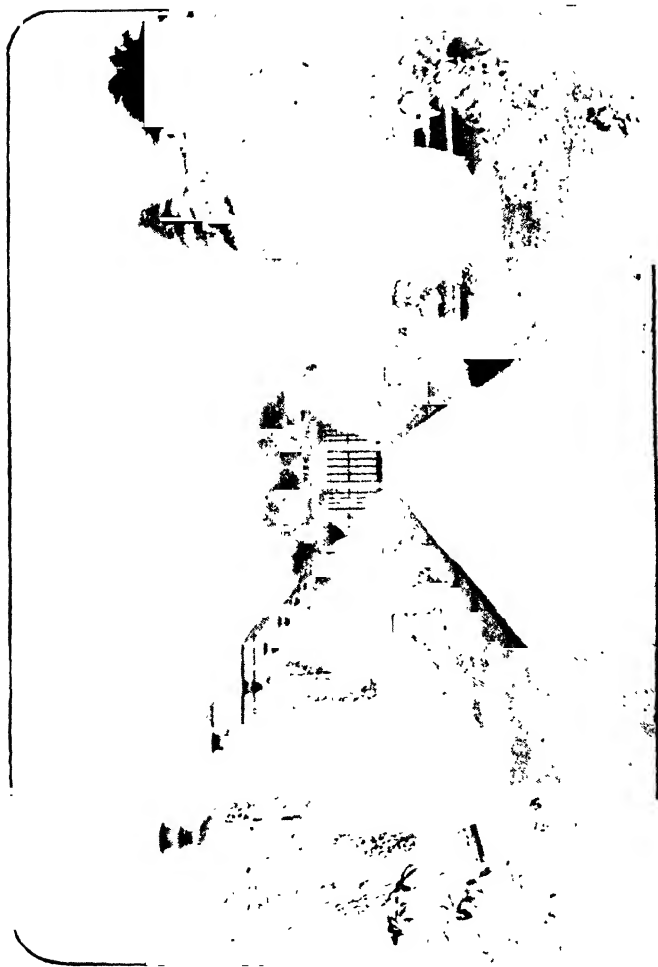
PREPARING SOIL.

There is one rule which every flower lover should begin with, and that is to bastard trench his soil. Would he form herbaceous borders?—let him bastard-trench. Would he make shrubberies?—let him bastard trench. Would he establish Rose beds?—let him again bastard trench. Bastard trenching is removing the top soil to the depth of a foot, breaking up the soil underneath a full spade depth, and then replacing

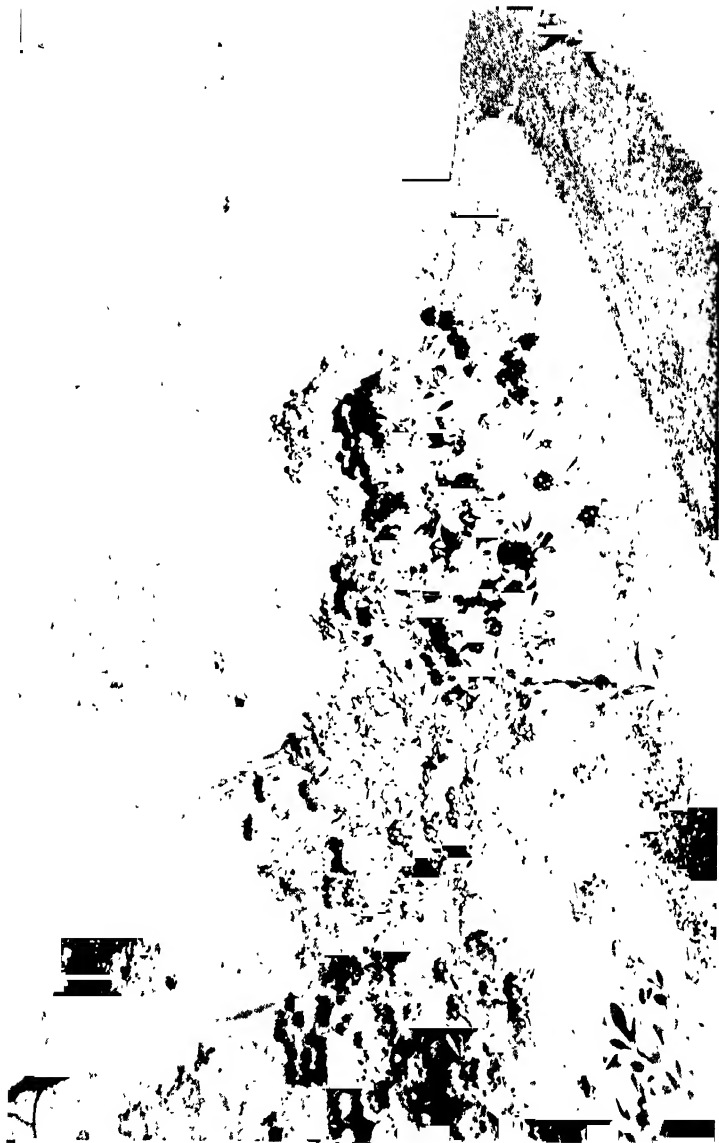
the top soil in its original position. It is a great advantage to sandwich in between, while the courses are being shifted, a dressing, at the rate of a barrowful to every 10 square yards, of rich, decayed manure. The cost of bastard trenching by local labour will range from eightpence to one shilling and threepence per square rod, according to the district, and according as the soil is light or heavy. Where there is chalk, rock, or gravel a spade depth from the surface, bastard trenching becomes difficult, but at least the soil may be improved by digging as deeply as possible, and applying manure both underneath and on the top.

DRAINING.

The necessity for draining should have careful consideration. If there are many gardens in this country that are suffering from want of drainage, it is certain that there are at least as many which are bled to death by over-drainage. Gardens on slopes rarely want drainage. If in a bottom they will probably need it, but even then very few pipes will be required if the soil is light. What pipes are laid should converge on the lowest part, where a pond may be formed. Stiff clay will cost about £10 an acre to drain, light loam about £5 10s. The following may be taken as reliable:—Stiff clay: 2,904 12-inch pipes, in rows 24 feet apart, at 30s. per



THE CONSERVATORY WALK AT TATTON PARK, A FORMAL STRAIGHT WALK WITH CONIFERS AND VASES



AN INFORMAL WALK. WINDING, WITH BELTS OF SHRUBS. (See page 136.)

1,000, £4 7s. ; 176 rods of trench 30 inches deep, at 8d. per rod, £5 17s. 4d.—total, £10 4s. 4d. Light land: 1,815 pipes, in rows 24 feet apart, at 30s. per 1,000, £2 14s. 6d. ; 100 rods of trench 36 inches deep, at 6d. per rod, £2 15s.—total, £5 9s. 6d.

MOVING SOIL.

If it is wise to utter a warning against unnecessary drainage, it is still more so to sound a note of caution with respect to shifting soil. It is not indispensable to level every mound and fill up every hollow in a garden. A natural knoll may be taken advantage of for a clump of shrubs or trees. A hollow may be turned into a pretty dell. A careful preliminary study of the natural configuration of a piece of ground would often save the garden maker from costly mistakes. Rubbish from the footings of a new building may form the base of a rockery near by, and the top soil will furnish the covering for it. Let them be carted straight from the ground and laid in separate heaps as near as possible to the place where they will ultimately be required ; the way will then be clear for both builder and gardener. The cost of moving earth is usually one shilling per cubic yard, which is equal to an ordinary cartload. If the earth has to be taken away to a distance the cost must necessarily increase.

COST OF TURFING.

In country districts the cost of turf is generally threepence per square yard. If it has to be carted a distance the cost may increase by about half a crown per hundred turves. On the other hand, a more favourable bargain may sometimes be made under the influence of local circumstances. The author has been offered good turves, from light land, for ten shillings per hundred, carted three miles—and has not refused !

COST OF PATHS.

The practical point that a path is not a drive or road has already been maintained, and it has to be fully recognised in considering the question of cost. A garden path is constructed for foot traffic, and not for heavy vehicles, such as carts. Except where the whole of the material has to be brought from a considerable distance, the cost of making a substantial gravel path should not exceed 3s. 6d. per square yard. This allows for a layer of large ballast in the bottom, chalk or small flint on the top (these two layers combined 6 inches thick), and a surfacing of gravel 3 inches deep. A tarred path will cost 1s. a yard less, but tar is apt to be sticky and smelly. Asphalte, on the contrary, will cost a great deal more.

HEDGES AND FENCES.

Privet and Quick are, perhaps, the most common of boundary hedges. They are rapid

growers in good soil, and bear cutting. Either makes a good hedge, the former evergreen, the latter bare in winter ; or they might be planted in mixture. Choose the Thorn for strong land, and Privet for chalk. It is false economy to buy mere slips, untransplanted. The better plan is to purchase transplanted "stuff" 2 to 3 feet high, and head it back after planting. A favourable price for transplanted 2-3 feet oval-leaved Privet would be 12s. to 18s. per 100 ; and of Thorns 5s. to 7s. 6d. per 100. The plants should be put in 9 inches apart. The "Myrobella," or Myrobalan Plum, is coming into favour as a hedge plant, in some districts displacing Quick ; it costs about the same in proportion to size of plant.

Fencing varies enormously in cost, and as it may easily become a very expensive item in a large place, careful consideration must be given to it. Perhaps the cheapest form is strand wire strained on to Oak posts. Not less than three lines of wire are required ; four or five are generally used. A wire fence will check stock, but will be of little value as a protection from the weather. If more shelter is wanted a Larch spar fence, costing about 2s. per yard run, may be used. Better still is an Oak paling fence, but it is much dearer. A fence 5 feet high would probably cost 7s. per yard run, but the cost varies in different districts.

PLANTING AND SHIFTING.

We use the term "planting" when plants or shrubs are first put into the garden, and the word "shifting" when an established plant is moved from one place to another. The great majority of trees, shrubs, and plants may be put in between the end of October and the end of March. The case as between autumn and spring planting may be briefly stated as follows: In autumn the nursery quarters are full, and there is no difficulty in securing good plants of any varieties in the catalogue; in spring the nursery is depleted, and the best plants of the best varieties have been sold—the early bird has got the worm. In autumn the soil retains some of its summer warmth, and the plants make a few fibres before the winter. In spring, if the winter has been wet, or has brought much snow, the soil is cold. In autumn garden work is decreasing, and there is ample time for planting; in spring work is increasing, and there is less time. The balance appears—indeed, is—on the side of autumn planting, but it is only fair to point out that the autumn planter has to face the risks of winter; the spring purchaser leaves those dangers to the nurseryman!

Equally as important as the period of planting is the state of the soil. It should neither be quite dry nor sodden. Contrary to general opinion, a very wet soil is as bad as a very dry one. The

author has a lively recollection of the planting of several hundred pounds worth of shrubs and trees by a well-known nurseryman on a light, gravelly soil, which dried badly in summer. The nurseryman decided to "puddle" them in order to give them a start. They were practically planted in mud, and they nearly all died.

If the ground is very wet or frostbound when shrubs arrive lay them nearly flat, with their roots in a shallow trench. With soil over the roots, and litter over the branches in very hard weather, they will lie safely for months, if necessary. The operation is called heeling-in. The planter should work by the following rules, and he will then have few failures :

(1) To plant when the soil is moist.

(2) To make relatively large holes, and spread the roots well.

(3) To avoid planting deeply.

(4) To make the soil firm over and around the roots.

(5) To stake securely.

These rules will equally apply to shifting. If it has to be done when the plants are growing, and the soil is dry, the operator should chop round them with a spade a few days before they are taken up, and when the time for shifting arrives, give a good soaking of water a few hours before taking them up. Many shrubs, including Rhododendrons, shift best in spring—say the

early part of April. When a shrub has to be transplanted some distance the roots should be wrapped in a mat.

STAKING, TYING, AND LABELLING.

Unless a freshly planted tree is staked securely its chances of quick establishment are not good, because it will be rocked about by the wind. The stake need only be of the same length as the main stem of the tree it supports ; the top should not rise among the branches, or it will be unsightly. The base should be charred or pickled in cold creosote for a length of 18 inches, to which extent it will be buried in the ground. The stakes should be put in when the trees are planted ; if inserted afterwards, damage to the roots may occur. A narrow strip of old sacking should be passed round the stem of the tree where the tying material is placed, or at any point where tree and stake might meet, to prevent abrasion. In very windy districts any long, straggling branches of autumn-planted Roses or fruit trees might be shortened, to reduce wind-sway.

The tying up of herbaceous plants is often done with so little judgment that what ought to be graceful masses of growth become so many ugly bundles. Michaelmas Daisies are dreadful sufferers in this respect. A stake is stuck in, a piece of cord or raphia is passed round the

plant about halfway up, and then the whole mass of growth is pinched in and tied to the stake. There is as much beauty in a plant so treated as there is in a bunch of market Celery. With a little thought and care the shoots can be looped to the stake in such a way that the natural grace of the plant is retained. Bamboo stakes are cheap and durable, although they may not be quite strong enough for heavy plants, such as Dahlias.

Labels present a difficulty to many flower lovers, who are torn by the conflicting troubles of a bad memory and a hatred of disfiguring their borders. There are, of course, many manufactured labels on the market, as may be seen by the examples of them in large gardens and parks. If they are too expensive, and wooden labels have to be resorted to, it is wise to soak them in cold creosote before using them. They are not only preserved, but rendered less conspicuous by this process. A sufficient space for the name, or a number (with a corresponding number, and the name, in a reference book), may be painted white at the top, or a small strip of ivorine may be tacked on.

TOOLS AND APPLIANCES.

The following are indispensable : A spade, a fork, a rake, a Dutch hoe, a trowel, a wheelbarrow, a garden line, a pair of sécateurs or

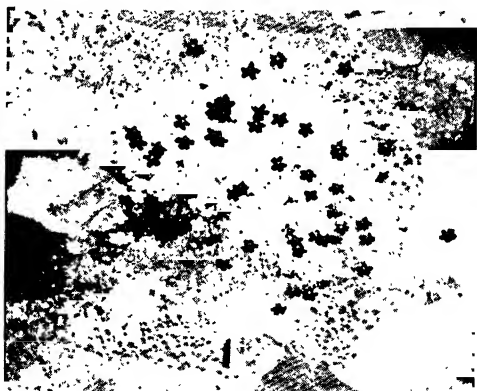
a pruning knife, a dibber, a besom or garden broom, a roller, and a mower. There should be a store for these, provided with a rack for hanging the lighter tools on, and a scraper, rag, and oil for cleaning. All tools should be cleaned directly they have been used. More work is entailed if they are allowed to become dry before cleaning is done. A good way of cleaning a dirty mowing machine is to swill it with hot water (which evaporates quickly, and does not remain to rust the steel), and then to oil the bearings.



A CLUMP OF EDELWEISS BESIDE A STONE-LINED WALK. (See page 139.)



THE LARGE SANDWORT, *ARENARIA GRANDIFLORA*, IN A
STONE BORDER,



THE ALPINE FLAX, *LINIUM ALPINUM*, IN A STONE
BORDER.

(See page 139.)

CHAPTER XXII.

ON ANEMONES.

THE genus *Anemone* is one of great importance, including, as it does, the *Hepaticas*, the *Crown* and *Japanese Anemones*, the *Pasque Flower*, and other beautiful plants. *Alpina*, 1 foot high, May blooming, white, does well in a damp border. *Angulosa*, 9 inches, late winter, blue, is the well-known *Hepatica angulosa*; there are pink and white varieties, which, however, are not common. *Apennina*, 6 inches, March, blue, rose and white, thrives under trees. *Blanda*, 6 inches, winter, blue or white, is an exquisite *Anemone*, and does not object to clay if the position is sunny and sheltered. *Coronaria*, 1 foot, April, different colours, is the familiar *Poppy Anemone*, of which a magnificent strain known as *St. Brigid* has become popular of recent years.

The *Alderborough Poppy Anemones* have been improved until they well deserve to rank as florists' flowers. They comprise single, semi-double, and double flowers, and the diversity and brilliancy of the colours is remarkable. They

are easily amongst the most valuable of early garden flowers, and make beds as effective as those of tuberous Begonias. They come readily from seed.

Fulgens, 1 foot, May, scarlet, is a popular Anemone, owing to its splendid colour. It likes a sunny spot.

Anemone Hepatica, 6 inches, May, blue (also white, pink, red, marbled foliage, double red, double blue, and double white varieties, the last rare), is the favourite little plant grown simply as the Hepatica in gardens. It is one of the freshest, most cheerful, and most dainty of spring flowers. It is easy enough to grow in shade, preferably under trees, but has a penchant for dying out in sunny borders. Propagation is by seeds or division. Hortensis (stellata), 1 foot, April, red and blue (also several single and double varieties), is a useful plant.

Japonica, 2 feet, autumn, red, is one of the finest of late-blooming perennials; and the white variety is still more desirable. The Japanese Anemone is rapidly attaining to the rank of a florists' flower, and many beautiful varieties—some of the best of which originated in Ireland—may now be had. Beauté Parfaite, Coupe d'Argent, Lady Ardilaun, Lord Ardilaun, and Whirlwind are a few. Heavy garden soil suits. Propagation is by division or cuttings of the roots. Narcissiflora, 1 foot, May, white, does

well in light soil in partial shade. It is propagated by seeds or division. *Nemorosa*, 6 inches, May, white or pale blue, is the well-known wood Anemone. There are several desirable forms, such as *grandiflora*, white ; *flore pleno*, double ; *Robinsoniana*, blue ; *rosea*, rose ; *purpurea*, dark blue ; and *bracteata*, with green frill. Peaty soil, in shade, suits it. Propagation is by division. *Pulsatilla*, 1 foot, April, blue, is the beautiful Pasque Flower. There is a white form, *alba*. Dry, chalky soil suits this. *Sylvestris*, 1 foot, April, white, and its double variety, are charming Anemones. They enjoy light soil, in shade.

CHAPTER XXIII.

ON PERENNIAL ASTERS (MICHAELMAS DAISIES.)

THE flower gardener who, in the old days, looked forward to the autumn with dismay, because it brought destruction to his tender bedders, now does so with happy anticipation, because with it comes the flowering period of one of the most gracious of hardy flowers—the Michaelmas Daisy.

A fairly representative collection of this magnificent plant will fill the garden with beauty from August to November. It will present a range of growth from 6 inches to 6 feet in height; of size of bloom from a threepenny bit to a crown-piece; of colour from white to lilac, lavender, blue, mauve, purple, and violet, and from blush to pink, rose, and crimson. Its main charm, however, will lie in none of these things, but in its unrestrained grace, lightness, and freedom of blooming.

With the advent of September a great many of the finest border flowers begin to decline, and every day sees them lose more and more of their

freshness. Flowers fade, leaves become rusty, and stems droop. A sombre shade steals over the border, invisible to the casual observer, but all too plain to the eye which has watched it from the first breaking of spring. It is at this turning point that the star of the Michaelmas Daisy rises, to brighten the dull days of autumn with its cheerful rays.

Perhaps the cult of the Dahlia has hitherto kept the perennial Aster in the background, but why two plants so completely dissimilar should ever have come into competition is difficult to comprehend. The Dahlia is a tender florists' flower, of high rank and beauty admittedly, but out of place in the mixed border, where, with all its brilliancy, it is incongruous. The Dahlia lover should give his favourites a special bed. The Michaelmas Daisy, *per contra*, is a perfect border flower, of unsullied character as to hardiness. Its softly tinted blossoms show up best against a background of shrubs, and when the tender autumn light steals on, its satiny mauves and dusky violets have an inexpressibly refined yet glowing warmth of colouring.

To get the full beauty from the Michaelmas Daisies they must be grown in deep, rich soil, and under frequent division. It is even well to renew them from cuttings, which give plants of great vigour. The author has had very gratifying results from striking cuttings of young

growths from the base in gritty soil in a cold frame directly they could be secured in late winter or early spring. But this is a luxury rather than a necessity.

If division is practised—and it should be done at least every other year if the finest plants are to be secured—let it be performed directly growth appears, which, in the case of some varieties, especially in mild districts, may be early in February. The larger sorts should be placed in the border near early-blooming plants, which can be cut back as they fade to make room for the Asters. This is a better plan than transplanting the latter from nursery beds when they come into bud, for they are quite liable to die away instead of advancing.

Inasmuch as the varieties often differ from the species in time of flowering, it is scarcely wise to endeavour to classify the following by period of bloom, but it may be said that those named will give flowers amongst them from early August to November. A classification as to height is, however, useful, and it may be said that those marked (*a*) are dwarf—6 to 18 inches ; (*b*) medium—18 inches to 3 feet ; and (*c*) tall—upwards of 3 feet.

While several of the old species are still worth growing, we now have a large selection of beautiful varieties from which to make our choice. The dwarf *Alpinus* (*a*), for instance, in itself a



BEAUTIFUL BORDERS OF THRIFT AND PINKS. (See page 140.)



ASTER 'MICHAELMAS DAISY' ERICOIDES CLIO. (See page 163.)

good plant, gives us splendid forms in *albus*, *roseus*, and *superbus*. *Amellus* (*b*), an excellent Aster, gives us, in addition to the valuable old variety *Bessarabicus*, magnificent varieties in *Framfieldii*, *Onward*, and *Riverslea*. The first of this grand trio is one of the most valuable Michaelmas Daisies grown, the height being 2 to 2½ feet, the habit bushy, the flowering abundant, and the colour—bright rose—extremely pleasing. *Cordifolius* (*b*) has in its train the graceful *elegans*, and *diffusus* (*a*) the distinct and beautiful variety *horizontalis*, a dwarf, bushy, October bloomer. *Ericoides* (*b*) is late, and should be grown in mild districts, also variety *Clio*. *Laevis* (*b*) has a charming bevy of daughters, of which *Ariadne*, *Calliope*, and *formosissimus* may be named. The excellent old *Novae-Angliae* (*c*) is now dropping out, its place being taken by the fine varieties *Mrs. J. F. Rayner* and *William Bowman*. *Novi-Belgii* (*c*), too, has to fight hard for a place in competition with its offspring, of which *laevigatus*, *Daisy Hill*, *Flora*, *Robert Parker*, and *White Spray* are a few of the best. *Puniceus* (*c*) is a blue September bloomer. *Tradescantii* (*c*) produces charming sprays for cutting, and so does *vimineus* (*c*), of which *Cassiope* is a good variety.

CHAPTER XXIV.

ON BEGONIAS AND DAHLIAS.

CONSIDERED as garden plants, Begonias and Dahlias have something in common, inasmuch as both are tuberous and late bloomers, but with tender growth that is destroyed by frost in autumn. The cultural routine with both runs on parallel lines, but in habit they are far apart.

The tuberous Begonia developed enormously during the closing years of the nineteenth century. The cross fertilisers gave us a splendid series of both single and double varieties, with good habit, large flowers, and a brilliant range of colours. The result was that Begonias grew rapidly in favour, both as greenhouse and garden plants. Their progress as bedding flowers has not been altogether uninterrupted, for in dry seasons they have been found ineffective on shallow, hot soils, making poor growth, and producing inferior flowers. This has resulted in setbacks in some districts. On moist, clay soils the tuberous Begonias are always good, and so far from a dry season proving inimical to them

they revel in it, making strong growth and bearing the finest of flowers. The author's greatest Begonia treat was in the dry summer of 1906, and fortunately it was prolonged owing to the mild autumn, which enabled the plants to maintain their beauty until the middle of November. It is as late summer and autumn flowers that Begonias are so valuable, and they should be at their best from the end of August to the middle of October.

For bedding purposes the best way of getting a suitable stock is to sow seeds of a good strain in heat in January, select the best varieties that result, and increase them by cuttings or by dividing the tubers. Named varieties may, of course, be purchased, but this is a somewhat expensive way of getting up stock. The seed is very small indeed, and should be carefully dusted over a fine surface, settled with a few particles of silver sand, and covered with damp moss, which must be removed when the seedlings appear. If grown on briskly, and planted in June, they will advance sufficiently to show their character the first year, although they will not be at their best until the second season.

The tubers, lifted in October or November, keep well in a cool outhouse, if safe from frost. They are best stored in Pine sawdust, as this generally keeps mice from them. Directly they

show signs of growth in spring they may be packed in leaf mould in shallow boxes, and put into a frame. This will ensure sturdy growth, and the plants can be put out with the leaf mould clinging to them when the proper time comes, so that they sustain no check. Very little heat is needed to bring the plants on for bedding ; that of a mild hotbed of leaves and manure suffices, indeed, they will do in a cold frame if protected in frosty weather. The more heat that is given the greater the necessity for care in hardening off before the plants are put out.

The fibrous-rooted section comprises several excellent bedding Begonias, dwarf in habit, and brilliant in colour. They can be raised from seed, and subsequently increased by cuttings in heat in spring or autumn similarly to the tuberous. Reading Snowflake, white ; and semperflorens rubra, otherwise known as Crimson Gem and Vernon, are two of the best varieties for the purpose in the fibrous-rooted section.

Where Begonias are being grown in light, hungry soil deep working should be practised, and a heavy dressing of cow manure incorporated. Further, the surface should be mulched with short manure. Good soakings of water will help the plants.

It may be added that those who like a quicker effect than they can obtain from seedlings, and who yet cannot afford to buy named varieties in

sufficient quantity, can often procure very good bargains in the way of sets of tubers of selected bedding sorts, unnamed, in spring.

The Dahlia is by no means a modern flower in the same sense as the tuberous Begonia, inasmuch as the florists of fifty years ago had varieties (of the Show and Fancy sections, at least) as good as any we have to-day. All the same, garden Dahlias have been immensely improved during recent years. The best of the Cactus and Pompon varieties are vastly superior garden plants to the treasures of the old florists, and it is to these sections that we must go in search of garden material. Fortunately, it is not only beautiful but cheap. It is true that novelties are dear in their first year, but propagation is so rapid, and competition among growers so keen, that high prices do not last long.

Valuable as the Cactus Dahlias are for the garden, there is still room for great improvement in one particular direction—namely, in the flower stems. In the majority of the varieties the flowers are too heavy for the stems to hold upright, with the result that much of the effect which the plants should produce is lost. It is to be hoped that flower gardeners will press the criticism on this point, with a view to convincing raisers that stiff, strong flower stems are equally as important as handsome flowers. At the same time, something can be done by the cultivator.

If he restricts the main branches of his garden Dahlias to half a dozen (increased to eight in the case of Pompons), he will get much more effective plants than if he allows them to grow unchecked, and become crowded with foliage, in which the flowers are often half buried.

That Dahlias love a deep, rich, fertile soil is well known. Mere manuring is not enough—the plants must have a deep root run to thrive. The ground should therefore be dug two spades deep, and in the process a coat of well-decayed manure incorporated. If there is any choice, select a heavy rather than a light soil, as it will hold more moisture, which Dahlias love.

Although plants may be raised from seed it is hardly worth while in view of the fact that excellent varieties can be bought for a few pence each. These may be ordered in March or April, to make sure of them, and planted at the end of May. Sturdy plants 7 or 8 inches high, turned out of small pots, will be best. They will form stools of tubers by October, if they have done well; and if they are lifted, dried, and stored in a cool, dry shed or cellar, they will throw up plenty of shoots suitable for cuttings in spring. Annual propagation is an advantage. Of course, old stools may be replanted, but as a rule they flower too early, and do not make such fine plants as young stuff. In preference to planting old stools, divide them, and plant the separate

tubers. Cottagers frequently get good plants by following this plan.

Strong stakes must be used for the main growth, and if the side branches can be neatly tied out to shorter ones finer plants will be got. It will be well to follow the time-honoured plan of inverting a small flower pot bedded with hay on each stake, to serve as a trap for earwigs, which must be searched for in the morning.

The following are the principal sections, with a selection of good garden varieties in each :—

Cactus.

Alpha, white, flaked purple.
 Amos Perry, crimson.
 Aunt Chloe, dark purple.
 Britannia, salmon.
 Effective, fawn.
 Ella Kraemar, rose carmine.
 Etna, carmine, shaded lilac.
 Floradora, wine crimson.
 Florence M. Stredwick, white.
 J. B. Riding, orange.
 J. H. Jackson, maroon.
 Lord Roberts, white.
 Mary Service, heliotrope,
 shaded pink.
 Mrs. Carter Page, crimson.
 Mrs. Edward Mawley, yellow.
 Mrs. H. L. Brousson, salmon.
 Mrs. J. J. Crowe, canary.
 Mrs. Winstanley, vermilion.
 Rainbow, light pink.
 Ringdove, fawn pink.

W. F. Balding, yellow, shaded salmon.

Pompon.

Bacchus, crimson.
 Buttercup, yellow.
 Daisy, amber.
 Guiding Star, white.
 Jessica, amber, red edge.
 Nerissa, rose.
 Phoebe, orange, suffused yellow.
 Sunny Daybreak, apricot.
 Tommy Keith, red, white tips.

Single.

Aurora, yellow, orange suffusion.
 Beauty's Eye, mauve, crimson ring.
 Columbine, rose, orange shading.

Demon, maroon.

Girlie, cream, red edge.

Leslie Seale, lilac, crimson disc.

Miss Roberts, yellow.

Polly Eccles, fawn, red disc.

Victoria, white, red margin.

Show.

Colonist, chocolate.

Crimson King, crimson.

Ethel Britton, white and purple.

John Walker, white.

J. T. West, yellow, edged purple.

Mrs. Gladstone, blush.

Mrs. Langtry, cream and crimson.

Perfection, orange.

R. T. Rawlings, yellow.

Victor, maroon.

Wm. Powell, primrose.

Wm. Rawlings, purplish crimson.

Fancy.

Comedian, orange and crimson.

Dorothy, fawn and maroon.

Gaiety, yellow, red, and white.

Matthew Campbell, buff and crimson.

Mrs. Saunders, yellow and white.

Peacock, maroon and white.

CHAPTER XXV.

ON CARNATIONS.

THE Carnation lover who looks back on the garden Carnation of twenty years ago—on Purple Emperor, W. P. Milner, and others of that order of merit—and then surveys a representative selection of modern varieties, may well rub his eyes in wonder. Except, perhaps, in the advance in Cactus Dahlias, we have nothing quite comparable to it in the whole range of garden flowers.

The Carnation was a great garden flower twenty years ago ; it is a greater one still to-day. The complaint has been made that there are not so many fragrant varieties as there were ; the real fact is that there are a great many more. The correct way of putting it is to say that the number of scentless varieties has increased with—and perhaps a little out of proportion to—the others. This is due to the favour in which yellow grounds are held by exhibitors. “The more yellow the less perfume” may be taken as an axiom in connection with Carnations. But the garden lover

is not compelled to grow yellow varieties, and he will find fragrance among most of the others.

There are few more beautiful bedding plants than the Carnation. Its silver tinted leaves are a perpetual defence against bareness. In its flowering period it is unsurpassed, for the delicate tracery of stem and leafage forms a perfect foil to the glorious flowers. Borders of hardy plants ought to contain clumps of Carnations, which will impart an air of refinement hardly to be got from any other flower. But whole beds may be filled with them if there are plants enough. There will be individual interest in them, as well as collective beauty, if some of the best varieties are grown.

If the Carnation were looked upon exclusively as a garden flower—which it is not—there would be less doubt expressed as to its hardiness than is the case now. Being cultivated as an exhibition flower, it is grown for a considerable part of the year under glass. This applies to the Selfs as much as to the Bizarres and Flakes—a condition of affairs which did not exist in years gone by, when Selfs were not shown much. Any plant that is partly cultivated out of doors and partly in, is likely to come under the suspicion of want of hardiness. The florists' Chrysanthemum is a case in point. It is reckoned as non-hardy, nevertheless thousands of plants live out of doors year after year.

The Carnation is hardy enough for any weather we are likely to get in the British Isles, and need never know glass ; but if the grower is not satisfied with the quality of the flowers which he gets in the open air he must cultivate it in pots.

A much more serious enemy than cold is the maggot, which does a good deal of harm if established in a collection, and attacks outdoor as well as indoor plants. As it burrows within the stem or leaf it often does irreparable harm before its presence is suspected, the centre or heart of the plant being attacked, with the result that it may drop right out. Watchfulness on the part of the grower would prevent this, as the pale, sickly appearance which the plants assume when the maggot is at work would be observed, and its operations brought to a sudden end by carefully slicing the shoot with a knife, and destroying the maggot with a needle. If a blister, with a greyish track leading from it, is noticed on any portion of the foliage, let the knife and needle be brought out again, for in all probability there is a maggot at work.

So far as the dreadful diseases black spot and rust are concerned, the outdoor grower has a great advantage over the indoor man, for they rarely give trouble out of doors ; if they do it is because the soil is too wet.

Even frame cultivation does not keep these

destructive pests at bay, although the condition of the soil can be controlled by the cultivator. The author has lost a dozen plants in frames to one in the open air. He found that the best plan was to pick off every affected leaf and burn it directly the attack was noticed. In some cases there was not much left of a plant when spring came, but if it had a healthy crown it was soon in active growth.

Those who grow Carnations in the open air should provide a well-drained, fertile, gritty soil, so that superfluous damp cannot collect about the plants. A warm, sandy loam is the best, but clay can be made to grow them if it is drained, well broken up, and opened with mortar rubbish, wood ashes, and leaf mould. Fibrous loam from turf is excellent, but particular care must be taken to exclude wireworms and leather jacket grubs, which love the fleshy roots of Carnations. If any are noticed impale some cut pieces of Potato on stakes, sink them in the soil near the plants, and examine them at frequent intervals.

In first starting with Carnations March is a good month to plant, and they should be put 15 inches apart to permit of the free growth of side shoots ("grass"), which, if layered in August, will give good stock for another year. The flower stem begins to spindle up well in advance of blooming, and will need support,



ASTER (MICHAELMAS DAISY) PUNICEUS. (See page 100)



ASTER (MICHAELMAS DAISY) FLORA (See page 163.)

but it must not be tied tightly to a flower stick ; it should be looped with Porter's, Sydenham's, or West's special supports. Small mounds consisting principally of leaf mould and sand should be placed under each shoot when layering time comes, and these, spread over the bed after the rooted layers are removed, will make a good mulch for the winter.

There are now beautiful varieties procurable in many different colours at low prices, but novelties are dear. The following are inexpensive, nevertheless they are garden varieties of the highest merit : Agnes Sorrel, dark crimson ; Hildergarde and Trojan, whites ; Lady Carrington, pink ; Capuchin, heliotrope ; Barras, scarlet ; Henry Falkland, yellow ground ; Bomba, salmon pink ; Asphodel, rose ; Gil Polo, crimson ; Daffodil, yellow ; Sir R. Waldie Griffith, apricot ; and Lady Nina Balfour, peach. If a terracotta is wanted, Francis Samuelson may be chosen, and it will make up fourteen lovely sorts.

CHAPTER XXVI.

ON GARDEN CHRYSANTHEMUMS.

Is the florists' Chrysanthemum, cultivated on the lines now practised, worth the trouble and expense that it entails? A person gazing at a prize stand, or at a collection in a conservatory in November, might reply "Yes" with some amount of emphasis. Truly the flower fills a void that without it would be severely felt. All the same, there is room for two opinions on the big bloom question.

The lover of garden Chrysanthemums might well leave those who are the most interested in the matter to fight it out among themselves, were it not that there would be danger of the impression (which is already held far too strongly) that only indoor Chrysanthemums are worth discussing being still further strengthened. The more argument there is over one particular class the more people are liable to conclude that it is the only one which counts. The mischief that this works has been seen among Roses. All Rose matter in the horticultural Press in years

gone by bore on exhibition varieties and show questions. The result was that people forgot that there were any other Roses in the world, and gardens were filled with varieties which had very little horticultural value. Garden lovers must see to it that the similar coterie which is interested in keeping show Chrysanthemums before the public does not work the same mischief as the Rose show clique did.

At present garden Chrysanthemums are being kept alive by cottagers, in whose gardens they give beautiful effects in autumn, in spite of the fact that this class of cultivator does not, as a rule, attempt to grow the plants at all, but simply leaves them to "come up." When they are really grown they are capable of magnificent work, and, in conjunction with Michaelmas Daisies, will do for the autumn what Roses, Carnations, Phloxes, and the rest do for the summer garden.

One of the most powerful recommendations of the Chrysanthemum is that a collection of late-blooming plants may be grown in a reserve plot, and shifted to their flowering quarters in the garden proper at the end of summer or early in autumn, when well set with buds. Cool, showery weather should be taken advantage of for this work of transplantation, but it can be done in dry weather if the plants are chopped round with a spade a few days in advance of removal, and well watered just before they are

shifted. In the dry autumn of 1906 the author shifted a large number of Chrysanthemums full of buds without their showing the slightest sign of a check. This means that beds and borders may be filled with earlier blooming plants without fear of autumn bareness, because they can be cut back when they fade, and the Chrysanthemums planted amongst them to carry on the display until sharp frost comes and spoils the flowers, which may not be until November is well advanced in mild districts.

It is stupid to speak of the Chrysanthemum as though it were a heaven-sent gift to a circle of cup-and-prize hunters. It is nonsense to class it as tender. It is as hardy as the vast majority of what are classed as hardy herbaceous plants, and the equal of the best of them in value as a garden flower. Although it will, and does, grow like a weed in cottage gardens, it responds to cultivation as readily as a Rose. It enjoys deep, rich soil, and does not in the least object to clay provided the ground is well pulverised.

The way to start with garden Chrysanthemums is to buy young rooted plants in spring, and to put them out about the middle of April. Subsequently the stock can be maintained, and increased if desired, by taking young basal shoots, with roots attached, in spring, and planting them in well manured soil a yard apart. Or they may be increased by means of cuttings. In the

latter case (and especially in stiff soils, where damp may cause losses that mere cold could not), it is wise to pot up some roots in autumn, or pack them close together in boxes with soil amongst them, and put them in a cold frame. As soon as fresh shoots have pushed from two to three inches long in late winter or early spring, they may be taken off and struck in small pots. The young plants will be ready for planting in April.

All the fearful and wonderful process of first breaks, bud timing, stopping, and thinning may be wiped out of the routine with garden Chrysanthemums if the object is to get free-blooming, decorative plants, capable of making the garden beautiful, and of yielding abundance of bloom for the house. But there is no reason why a little thinning, both of shoots and buds, should not be done if the grower fancies a smaller number of larger flowers. As a matter of fact, there is no better material for the borders than a plant with five or six main shoots. It is neither thin nor crowded. It is handsome as a plant, and it will give very nice flowers, good enough for anything except filling green stands in a stuffy drill hall. The side shoots which will show on the selected stems should be rubbed out as fast as they put in an appearance. This is a very simple business, and, together with staking, is all the summer attention the plants need. Thin-

ning the buds may be practised, but it should not be carried too far, or the plants will open all their flowers simultaneously, instead of in succession.

There is another thing the flower lover must guard against, and that is the belief that only early-blooming Chrysanthemums are good out of doors. Late varieties should also be chosen, otherwise the bloom will be over by the end of September. The lists herewith are put into two classes : (1) early, (2) midseason and late.

Early.

Carrie, yellow.
Crimson Marie Masse, red.
Fire Dragon, crimson and gold.
Gertie, salmon pink.
Goacher's Crimson, red.
Gustave Grunerwald, lilac pink.
Horace Martin, deep yellow, one of the best.
La Pluie d'Or, orange yellow.
Madame Desgranges, white.
Nina Blick, red and bronze.
O. J. Quintus, mauve.
Rabbie Burns, salmon pink.
Rubis, reddish claret.
Ryecroft Glory, bronze.
White Quintus, white.

Midseason and Late.

Crimson Source d'Or, bronzy red.
Elaine, white.
Ettie Mitchell, bronzy yellow.
Framfield Pink (Madame Felix Perrin), pink.
Golden Glow, yellow.
Jimmie, purplish crimson.
Julie Lagravere, crimson.
Mabel Morgan, yellow.
Miss Jessie Riley, white.
Soleil d'Octobre, yellow.
Mrs. Percy Cragg, amber.
Source d'Or, orange.
White Pet.
Wm. Holmes, crimson and yellow.

Most of these belong to the Japanese section ; they give a good range of colours, and they are, without exception, free bloomers.



CHRYSANTHEMUM WHITE PET, ONE OF MANY BEAUTIFUL VARIETIES
SUITABLE FOR THE FLOWER GARDEN



NARCISSUS GLORIA MUNDI. (See page 186)

CHAPTER XXVII.

ON DAFFODILS AND NARCISSI.

IN the brief references to Daffodils in the chapters on Bulbous Flowers and Wild Gardens it was indicated that their uses were varied and their adaptability great, but space did not permit of a consideration of the sections and varieties. A spring flower so important as the Daffodil demands such attention, which is accordingly given herewith.

First, however, let it be emphasised that but a very small portion of the beauty which Daffodils are capable of producing is seen when they are only represented by a clump or two in a spring flower bed. They ought to be freely planted in borders, bedded out in quantity, and also naturalised. This would be impossible in the case of the higher priced varieties except for wealthy people, but when bulbs of such really valuable things as poeticus and Barrii conspicuus can be bought for a few shillings a thousand there is no financial difficulty in the way.

The Lincolnshire and Cambridgeshire bulb

growers have had a great deal to do with the cheapness of Daffodils. They cultivate them in hundreds of acres, and sell them at prices which were undreamt of a few years ago. This has not brought down the price of novelties. On the contrary, a period which sees the popular sorts selling nearly as cheaply as Crocuses finds the newer and scarcer sorts valued at many pounds per bulb. Thus the Daffodil is the specialist's at the same time that it is the people's flower.

The fal'acy that all bulbous flowers require a light, sandy soil if they are to give of their best has been thoroughly exploded. That it suits many is undoubted; that it is essential to success is quite another matter. In the case of Daffodils it is doubtful whether sand may not be classed as positively detrimental; certainly where it consists of a dry bank, unmoistened by subsoil water, comparatively poor results are produced. On the contrary, clay gives immense vigour. The author has particularly observed that in the damp clay sides of the ditches around his garden clumps of Van Sion display a strength which they never attain to in drier spots, and the flowers are of huge size.

Growers of Daffodils on sand will be well advised to add liberal quantities of cow droppings, which, as a cool manure, will be particularly suitable. On stronger soils steamed bone flour,

at the rate of two ounces per square yard, will be good. It is a fallacy to suppose that Daffodils require large quantities of rich yard manure in a moist, holding soil. They need very little. The moisture is what they need. Given that, they will produce fleshy, fibrous roots, nearly as strong as those of Asparagus.

In view of the ease with which Daffodils can be transplanted, even when they are set with flower buds, there need be no hesitation about early planting. It is better to plant the bulbs early in a nursery bed, and shift them as the positions they are desired to occupy become vacant, than to keep them out of the ground until November or December merely because a few worn-out Dahlias stand in the way. Early planting prevents any risk of the bulbs making premature growth in bags or drawers. Those who are dealing with home grown bulbs which they lifted and ripened in June may plant them as early as August. Let it be noted, however, that lifting and drying off, although it may be a cultural convenience, is by no means a necessity when the bulbs are "at home" in a soil to their liking; and it takes time, and occupies space, which can ill be spared in some cases. Where the bulbs are grown in whole bedfuls it has to be done, because the ground is wanted for summer plants, but in borders it is quite possible to tie the foliage into a neat knot and plant fresh things close to

the Daffodils. If they are overgrown they will not resent it in the least, but will prove their vigour by coming up as strongly as ever another year.

Growers for exhibition may cry out against such rough and ready procedure, but if it encourages the liberal planting of Daffodils in mixed borders it well serves its purpose. With what complaisance Daffodils will bear shifting the author has proved by taking up clumps in autumn when a border was being re-made, leaving them just as they were dug up throughout the winter, and finally planting them out only when the colour was showing in the expanding flowers the following spring. The soil being of an adhesive nature, and moist, the clumps were as homogeneous as a potful of bulbs. Frost and snow had absolutely no effect on them.

Daffodils are admirably adapted for naturalising in grass, and when once established will come through turf as easily as a *Nymphaea* will come through water. They can be allowed to ripen their foliage up to June, and then scythed down with the grass safely. This is the simplest of all forms of growing them. Bulbs that have been forced, and are procurable at very low prices, are quite suitable for this purpose.

Daffodils make pretty beds, but the mixtures with Hyacinths and Tulips which are sometimes attempted in the public parks are not generally

CLASSIFICATION OF DAFFODILS. 185

harmonious. As a rule, the Daffodils are best kept to themselves.

In these remarks the term "Daffodil" has been used in a wide sense to cover all *Narcissi*, but scientific sticklers would not tolerate any such looseness. To them only a trumpet *Narcissus* is a Daffodil. A *poeticus* is not, nor is such a popular sort as Sir Watkin. It will be time enough to pay strict attention to the specialists when they have agreed among themselves as to a system of classification for *Narcissi*. This they have by no means been able to do up to the present. Mr. Baker's classification by comparative length of crown or trumpet and perianth segments holds good from want of a better, and in spite of the fact that varieties in the different sections have been intercrossed. It is as follows :—

(1) *Magni-Coronati*.—Corona (crown) funnel shaped or cylindrical, as long as, or longer than, the perianth segments.

(2) *Medio-Coronati*.—Corona cup shaped, about half as long as the perianth segments.

(3) *Parvi-Coronati*, corona small, obconic, or cup shaped.

Empress may represent the first section—the true Daffodils; Sir Watkin the second; and *Poeticus* the third.

The following are selections of varieties :—

Section 1.

Yellow Trumpets.

Big Ben.
cyclamineus.
Emperor.
Glory of Leyden.
Golden Spur.
Henry Irving.
Johnstoni Queen of Spain.
King Alfred.
maximus.
Monarch.
obvallaris.
Van Waveren's Giant.

Bicolors.

Duke of Bedford.
Empress.
Horsefieldii.
Madame Plemp.
Mrs. Morland Crosfield.
Mrs. Walter Ware.
princeps.
Victoria.
Weardale Perfection.

White and Sulphur.

albicans.
cernuus.
C. W. Cowan.
Madame de Graaff.
pallidus praecox.
W. P. Milner.

Double Trumpets.

Capax plenus.
lobularis plenus.
Telamonius plenus (Van Sion).

Section 2.

Backhousei Border Maid.
" Wolley Dod.
Barrii conspicuus.
" Flora Wilson.
" Golden Gem.
" Maurice Vilmorin.
Humei concolor.
Incomparabilis Autocrat.
" Cynosure.
" Gloria Mundi.
" Gwyther.
" Lucifer.
" Sir Watkin.
" Stella superba.
" Sulphur Phoenix and Orange Phoenix.
Leedsii amabilis.
" Duchess of Westminster.
" Katherine Spurrell.
" Maggie May.
" Minnie Hume.
" Mrs. Langtry.
Nelsoni major.
" Mrs. C. H. Backhouse.
odorus rugulosus.

odorus triandrus.

„ albus.

„ Cloth of Gold.

„ S. A. de Graaff.

Section 3.

biflorus.

Burbidgei Ellen Barr.

Poeticus Almira.

„ Cassandra.

„ plenus (double

Gardenia Nar-
ciss).

„ ornatus (early).

„ Poetarum.

CHAPTER XXVIII.

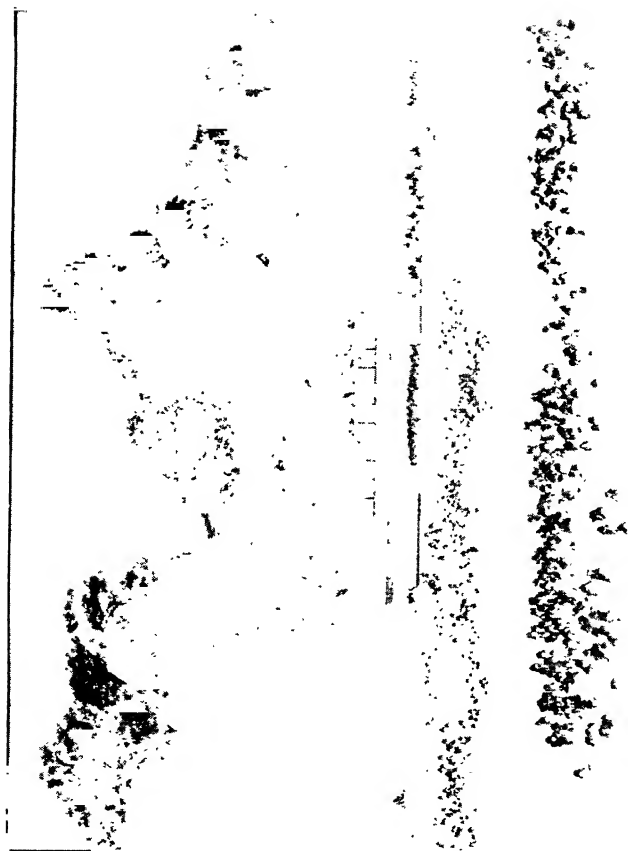
ON GLADIOLI.

THE Gladiolus is as grand a flower for late summer and early autumn as the Carnation is for early summer. To grow it is to deeply admire, if not to love it. If it lacks the winsomeness of some of our scented garden favourites, such as the Sweet Pea, it possesses exquisite grace and much beauty of colouring. Beyond question it is a front rank hardy flower, and one that we must have in the home garden. We may grow clumps of it in the mixed border ; or, better still, make a small bed for it. In either case its graceful foliage and tall, arching flower stems have a powerful attraction for the cultivator.

The Gladiolus is valuable for cutting, and it has the great merit of opening its beautiful bells successionally in water if cut young. Thus one spike may be an object of beauty in a room for two or three weeks. The stage to cut is when the lowest flowers are opening ; every bud will then unfold to the very tip of the spike. Nor does cutting spoil a bed, as if the spikes are taken



NARCISSUS MADAME DE GRAAFF (See page 186.)



THE IRIS GARDEN AT KEW. (See Chapter XXIX.)

at the early stage indicated fresh ones will be thrown up, and the beauty of the collection prolonged.

Like every other popular florists' flower, the *Gladiolus* is constantly cross fertilised, and thus we see an endless stream of novelties. The fair *débutantes* are expensive in their first year, but scores of beautiful Gladioli can be bought for a few pence each. The old species should not be overlooked by those who have to study economy. Some of these sorts are very valuable in the garden, although the cost of bulbs ("corms," to be exact) is low. Take *Brenchleyensis*, for example. This is a vigorous *Gladiolus* that bears magnificent spikes of scarlet flowers, and it is a particularly useful plant where borders have to be furnished quickly, as it can be planted in autumn, and will flower splendidly by the following midsummer. It can be bought for less than a penny a corm. Other cheap and good Gladioli are *Blushing Bride*, *Colvillei*, *C. alba*, *delicatissima*, *floribundus*, *Ne Plus Ultra*, *psittacinus*, and *ramosus*. Most of those are early bloomers; and one or two, notably *Colvillei alba*, are much used for pot culture. They are all graceful in growth, and the colours are pleasing and delicate.

The noble florists' *Gladiolus* of the September garden is of hybrid origin—that is, it has originated by intercrossing distinct species. The first of these hybrids was distributed by a florist at Ghent (Gand), and hence was called Gand-

avensis. There is some difference of opinion as to its exact parentage, but the garden lover will probably not worry his head about the matter. Sufficient for him is the fact that in what are called the "Gandavensis hybrids" he has a rich store of beautiful material.

Another section, called Lemoinei, after the originator, resulted from crossing Gandavensis with the species pupureo-auratus. The varieties may generally be known by the blotch at the base of the lower segments. Cross fertilising between Lemoinei varieties and Gandavensis varieties yielded another section, called Nanceianus, owing to their having originated at Nancy, where the great florist Lemoine carries on his work. Gandavensis, united with seedlings of the species Saundersii, gave us yet another section, called Childsii, from their introducer (though not raiser), the American nurseryman Childs. They are bold, effective plants, but the flowers lack refinement.

While there have been—and, indeed, still are—lines of demarcation between the sections, the fact that cross fertilisers are using them indiscriminately to produce new varieties is tending to obliterate the distinctions. The flower lover will not particularly regret this if he gets better garden sorts, though the botanist may.

Most of the Gladioli are hardy, and will live from year to year if treated like the majority

of herbaceous plants, but as losses of corms from excessive damp are liable to cause trouble it is wise to lift them each autumn, dry them, store them for the winter in a cool, dry place, and replant them in the spring. While a warm, sandy loam probably suits them better than any other class of soil, they will give splendid results on clay if it is drained and well tilled. Bone flour, at the rate of 2 ounces per square yard, is a very suitable fertiliser. If yard manure is used it should be in a thoroughly decayed state. Stuff from an old Cucumber, Mushroom, or Violet bed is safer than rank manure fresh from stables. Decayed cow manure is also good. The corms may be buried 3 inches deep, and put 18 inches apart. The plants do not need a great deal of attention during the growing season, but the ground should be kept free from weeds, and the flower stems tied to neat stakes in good time.

When the plants are lifted in autumn it will be found that the original corm has died, and that a new one is superimposed upon it. In addition, there may be little cormlets clustering round the base. The old corm may be thrown away, and the cormlets preserved for growing on.

<i>A Selection of Gandavensis</i>	Burne-Jones.
<i>Varieties.</i>	Commandant Marchand.
Althaea.	Dalila.
Baroness Burdett-Coutts.	Dr. Bailly.

Enchantresse.
 Fantôme.
 Formosa.
 Grand Rouge.
 Hamlet.
 La Parisienne.
 L'Incendie.

Iolanthe.
 Lady Montagu.
 Martial.
 M. A. Brongniart.
 Mrs. Wood.
 Pyramide.
 Sultana.

These are not expensive. More modern sorts, raised by Kelway, Burrell, Bull, and other raisers, can be had at higher prices.

A Selection of Lemoinei Varieties.

Baron J. Hulot.
 Deuil de Carnot.
 Dr. Regel.
 Eclipse.
 Ethiopie.
 Hippolyta.
 Jane Dieulafoy.
 J. H. Krelage.
 Paul Lemoine.
 Rosa Bonheur.
 Vesuve.
 W. E. Gumbleton.

A Selection of Childsii Varieties.

Ben Hur.
 Bessie Tanner.
 Cavour.
 Dr. Sellew.
 Henry Gillman.
 Wm. Falconer.

A Selection of Nanceianus Varieties.

A. R. Smith.
 Colonel Gillon.
 Le Grand Carnot.
 Massena.
 President Chandon.
 Tsarine.

CHAPTER XXIX.

ON IRISES.

THE Iris cult spreads apace. Every year finds the number of Iris lovers increase. We actually hear of Iris gardens. Let us, if a little startled at the outset in hearing of a garden being given over wholly to Irises, hasten to concede that the owner displays at least as much good taste and wisdom as he who gives up all his time and space to Dahlias, or Potatoes, or "Geraniums."

After all, why not an Iris garden? Why not, at all events, an Iris garden within *the* garden? People are beginning to discover that there is a great charm in having gardens within gardens. Instead of great blocks of staring beds they divide the garden up with belts of shrubs, hedges, and arches into a series of secluded enclosures, opening into each other by winding, flower-bordered paths. In each enclosure some good flower is specialised, in greater or smaller quantity, as space and means permit. Consider the pleasure of walking round such a series of "inner ring" gardens. There is no blare of

noisy colour anywhere. There is no desolating monotony. The senses are stimulated with the idea of boundless space. Pleasant hours pass in perambulating an acre. First there is the Rose garden, with its glowing arch of Crimson Rambler, at once herald and sentinel. Then there is the Carnation garden. The Lily garden follows. And presently, by perfumed, flowery paths, we come to the Iris garden.

Whatever be our leaning towards any particular flower, the Iris will challenge it. If we ask for beauty and variety of form, the Iris gives us both in ample measure. If we ask for richness of colouring, we see it in the Iris in a degree almost unexampled amongst hardy flowers. Fragrance we get, too, if not in every species. Above all, there is in the Iris that indefinable thing called charm. Our interest and affection are coaxed out of us almost unconsciously.

Every garden, then, must have its Irises. If only the cheapest, most easily grown sorts can be managed, we shall go for our material to the "Flags" and the bulbous English and Spanish. There are few cheaper plants than these; there are few more simply cultivated; assuredly there are none which yield such grace of growth and beauty of colouring. Given more ample means and leisure, we shall turn our attention to choicer species and hybrids. For some, requiring special treatment, we shall make

separate provision. We shall introduce certain lowly gems to the rockery, and a few we shall grow mainly in frames.

It may be well to take a bird's eye view of the great genus *Iris*, in order that we may get an idea of the nature of the material at our disposal. And to begin with, we will make ourselves acquainted with the fact that the Irises are divided into two great sections—those with long, creeping rootstocks, called rhizomes, and those with bulbs. The former are termed the Irises proper, the latter Xiphions. A familiar example of the first section is the common Blue Flag or German Iris, and the second the Spanish.

If the rhizomatous Irises included none besides the Flags they would still be a large and valuable class, for its varieties are numerous, extremely diversified in habit, and of most beautiful colours. The Flags are sometimes themselves divided into sections—the bearded and the beardless. But there are many other rhizomatous species, and in some instances they expand into quite large and important sections, such as the Cushion Irises.

The species include many beautiful plants, among which may be mentioned *aphylla*, *cris-tata*, *Florentina*, *Germanica*, *laevigata* (*Kaempferi*, the famous Japanese Iris), *pumila*, *Sibirica*, *squalens*, and *variegata*. Of most of these there are several varieties.

In the Cushion Irises we find such beautiful and interesting things as *Bismarckiana*, *Gatesii*, *Iberica*, *Korolkowii*, *Lortetii*, and *Susiana* (the Mourning Iris). As a class they are not nearly so hardy and accommodating as the Flags, requiring light soil and warm positions, together with protection from heavy rain in some cases. But such gems as *Gatesii*, *Lortetii*, and *Bismarckiana* are worth much more trouble than they cause.

When we turn to the second great group—the Xiphions—we find an equal wealth of material, comprising some of the most delightful Irises grown. Leaving altogether out of account for the moment the scores of beautiful varieties of the English Iris (*Xiphioides*), and the Spanish Iris (*Xiphium*), which are a host in themselves, we have still left such Irises as *alata*, *Bakeriana*, *Histrio*, *Persica* and its beautiful variety *Heldreichii*, *reticulata* and its varieties (of which *Krelagei* is one of the best), *Danfordiae*, and *Rosenbachiana*.

The flower lover who wants bold effects from Irises, particularly if he lives in or near a town, will be wise to devote most of his attention to the Flags. These will grow almost anywhere, and their thick masses of long, narrow leaves, tall stems, and huge flowers are very impressive. With occasional division and transference to richer soil, which may be done at almost any

time from August to spring, they will thrive for many years. They may, of course, be grown in herbaceous borders.

Equally dominating are the Japanese Irises, varieties of *laevigata*, but these will not succeed, like the Flags, in dry places. They love root moisture, such as they get at the waterside. When well suited they grow to an enormous size, and the spreading, flattened, richly coloured flowers are as large as dessert plates. Another moisture loving Iris is the common hardy, yellow species *Pseudacorus*, known as the Water Flag.

The Cushion Irises will prove an abundant source of interest. The lover of these beautiful plants will find a sunny, sheltered spot for them, where they will have protection from cold winds in spring. He will endeavour to procure some good, light loam, well disintegrated with abundance of sand if at all adhesive. He will fix small squares of glass over them to ripen them after flowering. And if the position is at all cold he will spread reeds or light litter over the beds when winter approaches.

Pumila, and other dwarf species, are well suited to the rockery. *Sibirica*, a graceful though not showy plant, thrives on heavy, well-worked clay; it loves moisture. *Unguicularis* or *stylosa*, *Danfordiae*, and some others flower in winter, and must have shelter when in bloom, or the flowers may be spoiled by frost. The lovely,

perfumed *reticulata* and its varieties are also winter bloomers, and owing to their liability to injury when in the open air are frequently grown in pots in frames.

Nearly all the Irises may be planted in autumn or early winter, but the Cushion Irises are best kept out of the ground until December, as if planted earlier they are liable to make growth which is cut by frost. English and Spanish Irises can be bought with the Dutch bulbs in October, and they are as cheap as most. But it must not be supposed that because they can be purchased for a few shillings a hundred they are not worth growing. They are really beautiful for late spring and early summer blooming. They are good in the mixed border, and make excellent beds. They do not need frequent disturbance.

SELECTIONS OF RHIZOME-ROOTED SPECIES AND VARIETIES.

Amoena.—A spring bloomer, 1 foot high, blue. See separate list of varieties.

aphylla.—A charming species, lilac, with white beard, growing about 1 foot high, and flowering in May. A separate list of varieties is given.

aurea.—3 to 4 feet high, yellow.

biflora.—An April bloomer, violet or purple, with yellow beard. This is sometimes grown under the name of *fragrans*.

cristata.—A charming species, but not quite hardy. It bears lilac and yellow flowers in April and May, only 5 inches above the ground. It is the same as *Japonica*.

flavescens.—A May bloomer, yellow flowered, growing 2 feet or more high.

Florentina.—White, a spring bloomer, 2 to 3 feet high. This yields the Orris Root. There is a nice white variety called *albicans*.

foetidissima.—The Stinking Gladwin, a British plant, often conspicuous owing to its orange seeds.

Germanica.—A separate list of varieties is given.

laevigata.—A separate list of varieties is given.

neglecta.—Lilac, with yellow beard, flowering in June, and growing about 2 feet high; there are several desirable varieties, of which a short list is given.

pallida.—A splendid plant, 3 feet high, with pale lilac flowers.

pumila.—A dwarf Iris, growing about 8 inches high, flowering in spring, colour lilac and purple, with white beard.

Sibirica.—Blue, 2½ to 3 feet high, and flowering in late spring. The white variety *alba* is a desirable plant.

squalens.—The Elder-scented Iris, 2 to 3 feet high, flowering in June, lilac and yellow. A separate selection of varieties is given.

Ungicularis (stylosa).—A charming winter-flowering Iris, colour lilac, height 1½ to 2 feet. The white variety is also a pretty plant.

variegata.—A May bloomer, claret and yellow, height 12 to 18 inches. A separate selection of varieties is given.

Good Varieties of Amoena.

Calypso, white, blue veins.

Duc de Nemours, purple, white edge.

Mrs. H. Darwin, white, veined purple.

Good Varieties of Aphylla.

Bridesmaid, lavender.

Gazelle, white, lilac, and blue.

Madame Chereau, blue and white.

Good Varieties of Germanica.

alba, white.

Kharput, blue and violet.

Purple King, purple.

Good Varieties of Neglecta.

Cordelia, lilac and crimson.

Fairy Queen, lavender, violet veins.

Hannibal, lavender and purple.

Good Varieties of Pallida.

Celeste, blue.

Garibaldi, rose and lilac.

Madame Pacquette, claret.

Good Varieties of Squalens.

Harrison Weir, bronzy brown and crimson.

Lord Grey, fawn.

Mozart, bronzy yellow, white veins.

Good Varieties of Laevigata.

Jokai, crimson.

Kumagai, white.

Nagato, lilac blue.

Tanga, deep blue.

Yamagata, white, violet veins.

Good Varieties of Variegata.

alba, white.

Chénédolé, yellow and white.

Darius, yellow, brown veins.

The above are bearded ; the following are pretty beardless Irises :—

aurea Lauchiana, golden yellow.

Hartwegi, 1 ft. high, May bloomer, yellow.

Monnieri, yellow.

Monspur, blue, with yellow spots.

spuria A. W. Tait, blue.

A Selection of Cushion Irises.

Bismarckiana, 9 inches high, blue and yellow.

Gatesii, 2½ inches high, creamy white with grey spots.

Iberica, 6 to 9 inches high, lilac, white and purple.

Korolkowii, 1 foot high, white, veined with brownish red.

Lortetii, 1 foot high, cream, rose veins.

nigricans, purple, black and crimson.

Paradoxa, white, veined blue.

Sofarana magnifica, grey, purple crest.

Susiana, black and brown, lilac spots.

Tubergeniana, metallic green and blue.

Urmiensis, primrose and yellow, fragrant.

Species and Varieties of Bulbous Irises.

alata, an autumn bloomer, lilac and purple, spotted yellow.

A pretty Iris, with several varieties.

Bakeriana, 6 inches high, a winter bloomer, white, violet and blue, scented.

Danfordiae, 6 inches high, a winter bloomer, yellow, with brown spots.

Histrio, 1 foot high, a winter bloomer, lilac.

orchioides, 9 inches high, flowers in April, yellow.

Persica, 3 to 4 inches high, a winter bloomer, yellow and lilac.

The variety *Heldreichii* is lavender and violet, veined white, and with yellow crest.

reticulata, 6 to 9 inches high, a winter bloomer, violet, with lilac crest. Fragrant. *Krelagei* and *histrioides* are charming varieties.

Rosenbachiana, March, yellow, orange and purple.

Xiphioides, English Iris. See separate list of varieties.

Xiphium, Spanish Iris. See separate list of varieties.

A Selection of English Irises.

Clara Butt, China white.

Emperor, grey, blue spots.

Lord Palmerston, black, crimson, and purple.

Mont Blanc, white.

Rosa Bonheur, white, flaked crimson.

Vainqueur, lavender, violet spots.

All grow about 2 feet high.

A Selection of Spanish Irises.

Avalanche, white, yellow spots.

California, yellow, orange spots.

Catherina, blue, white, and orange.

Golden King, yellow.

Snowball, white, yellow spots.

Thunderbolt, purple, orange blotches.

All grow about 18 inches high.

CHAPTER XXX.

ON LILIES.

AMONGST the noblest of summer flowers, *Liliums* are rightly receiving special attention from flower lovers. They have, however, escaped the questionable honour of being specialised for exhibition. It is rarely that they are shown except in trade groups, although they are sometimes included in competing stands of hardy flowers.

The *Lilium* is a great, unsullied garden flower, which stands as a living proof that native worth may suffice, without artificial exhibition aid, to make a plant lastingly popular. *Auratum*, the Queen of the genus, leaped into favour on the very day that it was first exhibited, and its career since has been a triumphal march. *Giganteum*, with its lofty stems crowned by pure white flowers, has nearly as many followers, although, if pot culture be included, it is out of the race. *Speciosum* (*lancifolium*), wrongly regarded as a quite tender Lily, and consequently grown almost exclusively in pots, is a good garden plant, and the same may be said of *longiflorum*.

Brownii is not so familiar as some, but its worth as a garden plant is ensuring it a steady advance. *Candidum*, the Madonna or Old White Garden Lily, is amongst the cheapest, purest, and sweetest. It is probably over-cultivated, as in rich borders it is frequently diseased, whereas in the undisturbed borders of cottage and farmhouse gardens it thrives. It needs very early planting in autumn.

The Orange Lily, *croceum*, is grown in many gardens to the exclusion of really beautiful sorts. This is unfortunate, as it is essentially a vulgar flower, flamboyant and aggressive in its colouring. If it has a claim, it is that it will often thrive in cat-haunted, man-muddled suburban gardens, where any plant with a particle of self-respect would die in despair. A Lily equally bright, but of a more refined tone of colour, is *Chalcedonicum*. *Elegans* (*Thunbergianum*), too, and *Martagon* (the latter the brilliant Turk's Cap) have colour enough for anyone, without being so irritating as the pushful *croceum*.

Two very pretty yellow Lilies are *Hansonii* and *Henryi*, the latter being the warmer in hue. They have not so large a following as the bigger Lilies, but they are good in their way, though mainly grown in pots. *Humboldtii*, too, the yellow flowers of which are spotted with purple, is a useful species. *Pardalinum*, the Panther Lily, is a very richly coloured plant ; and a very pretty

and pleasing species is the pink *rubellum*, which is a dwarf grower, and very easy to succeed with. *Sulphureum*, pale yellow ; and *testaceum*, marked yellow, come into the second or third rank ; the former is not quite hardy. The Tiger Lily, *tigrinum*, with its red, black spotted flowers, is a good garden plant ; and so is the red *umbellatum*.

The growing popularity of *Liliums* has led to a great deal of attention being given to the production of new forms. Many of the species have been crossed, and we now have a series of useful hybrids, some of the best of which are named in the selections at the end of the present chapter. This work will go on, and may be expected to greatly enrich our collections in the course of years. In addition to the acquisitions from this source, we are happy in the possession of many beautiful varieties, which are even more valuable than their parents. Of *auratum*, for instance, we have noble varietal forms in *platyphyllum*, *rubro-vittatum*, and *Wittei*. The best of these are also named in the selection.

Here, then, is a brief glance at the most valuable components of the fine genus *Lilium*, and we may now consider methods of turning such splendid material as it gives us to the best advantage in the garden. Lovers of *Rhododendrons* who do their favourite shrub well may count on particular success with *auratum* and

its lovely bevy of daughters by making bays for them in the beds. The Rhododendrons give the young growths shelter from sharp winds, and the peat and loam afford the Lily a food perfectly to its taste. The same conditions suit the stately giganteum, which lifts its snowy bells 10 feet or more into the air when it is suited by the soil and position. In neither case must the plants be overgrown. The Rhododendron is not the only evergreen with which these majestic Lilies can be associated, provided peat and loam bulk largely in the compost.

Herbaceous borders offer natural homes for Liliiums, and the great majority will thrive in well-drained, loamy soil. The manured clay which gives such splendid results with the great majority of herbaceous plants will also suit a good many, but it should be lightened with loam, peat, and sand for auratum and giganteum. Useful Lilies like candidum, speciosum, tigrinum, elegans, and umbellatum, with their varieties, will thrive in light, sandy soils. When planted in borders, the choicer sorts ought to be placed in positions where they will receive shelter from the rising stems and expanding foliage of early growing plants. This attention often has a greater bearing on success than any other cultural item, as it prevents the early crippling which so often has lasting ill-effects on Lilies.

Care should be taken that the bulbs do not

get dry before planting, or make premature growth. The former remark has special reference to *auratum*, of which imported bulbs are planted in thousands every year. The author has handled a good many of these bulbs, and he finds that the best thing is to carefully examine each one as it is removed from its casing, pick off any rotten scales, rub flowers of sulphur into decaying patches, and then bury the bulbs in a box of moist sand or cocoanut fibre refuse for a few days in order to freshen them up. If then planted about 4 inches deep in sandy loam they will generally grow very strongly. The danger of premature growth is most serious with *candidum*. This Lily is imported in a dormant state by the dealers in cases, and often comes to hand late in August or in September. It ought to be bought and planted before the summer is out, as if it grows in the boxes in seedsmen's shops it is certainly not improved for the garden.

Lilies of doubtful hardiness, such as *speciosum* and *Henryi*, may have some dry, cool litter spread over the stools when winter approaches, to serve as a protection in hard weather.

The letter (P) attached to a name in the list below indicates a peat lover, and (L) a loam lover.

A SELECTION OF THE BEST LILIES.

auratum (L. and P.).—The varieties *platyphyllum*, *rubrovittatum*, *virginale*, and *Wittei* are all valuable. *Rubro-*

- vittatum* has a broad, reddish band down the centre of the petals. The last two are pale forms of great beauty.
- Brownii* (L.).—A good summer Lily, whitish brown in colour and averaging 4 feet high. *Chloraster* is a pretty variety. *Leucanthum* comes very close to *Brownii*, and is often classed as a variety of it.
- candidum*.—*Giganteum* is a good variety of this old favourite.
- Chalcedonicum*.—A brilliant summer Lily, growing about 3 feet high. *Heldreichii* is a notable variety.
- elegans* (*Thunbergianum*).—A very useful Lily, and parent of some valuable varieties, such as *atrosanguineum*, red; *Batemanii*, apricot; and *Orange Queen*, orange red.
- giganteum* (L.).—A magnificent white July flowering species, which may grow 10 or 12 feet high.
- longiflorum*.—A good dwarf, white Lily, mostly grown in pots, with its variety *Harrisii*.
- Martagon* (*Turk's Cap*).—Grows about 3 feet high. A summer bloomer. The varieties *album*, white; and *Dalmaticum*, purple, are good.
- speciosum* (*lancifolium*).—White, with spots. The varieties *album Kraetzeri*, *Melpomene*, *roseum*, and *rubrum* are all more popular as pot than as garden plants.
- umbellatum*, red, about 2½ feet high, an early bloomer, a good Lily. *Erectum* and *Cloth of Gold* are two charming varieties of it.

In addition to the above *Canadense* (P), *Henryi*, *Humboldtii* (L), *Monadelphum* (L), *Nepalense* (tender), *pardalinum* (P) (particularly the variety *Bourgaei*), *rubellum* (L), *sulphureum* (tender), *testaceum*, and *tigrinum* (notably the varieties *Fortunei* and *splendens*) are worth adding if room can be found. A very complete collection might include, in addition to the preceding and

the hybrids named below, *Catesbaei*, *Neilgherrense* (tender), *pomponium*, *Pyrenaicum*, *superbum*, and *Washingtonianum*.

GOOD HYBRID LILIUMS.

Burbankii.—Apricot, flowers in summer, about 4 feet high.

Dalhansonii.—Dark purple, about 5 feet high.

Kewense.—White and buff, a cross between *Henryi* and *Brownii* Chloraster, a very pretty Lily, well adapted for pot culture.

Markii.—Orange red with brown spots, very tall.

If the disease should show itself in *candidum* it will be wise to lift the bulbs when growth has died away, and put them in a bag containing flowers of sulphur for a few days, also working some of the sulphur into the scales. The disease often spreads swiftly, and does great damage. The *auratum* disease also works great mischief, particularly amongst imported bulbs. Mr. George Massee, the eminent fungologist, recommends that kainit should be mixed with the soil. Six ounces per square yard might be used, preferably in autumn, and lightly pointed in.

CHAPTER XXXI.

ON PAEONIES.

PAEONIES have risen rapidly to the front. Twenty years ago they occupied a modest position, somewhat comparable to that of Sweet Peas, and the two flowers have advanced together. In their modern, improved form there are few hardy plants more valuable than Paeonies. The flowers are of great size, borne well up above the foliage, embrace a considerable range of colours, and many are fragrant. But the value of the plants does not lie solely in their flowers. The stems, full of warm colour, make a very bright and cheerful feature in the spring, and later, when the foliage has fully developed, it is extremely handsome.

The Paeonies are divisible into two sections : (1) herbaceous, (2) tree or shrubby. The varieties of the former now grown in gardens have been derived principally, though not wholly, from the species *albiflora* and *officinalis*. The varieties of the other have come from the species *Moutan*.

Dealing first with the herbaceous section.

the members of which die down annually, it may be said that although the species are not without beauty, the hybrids and varieties are so much superior for garden purposes that they may be relied on exclusively. This should certainly be the case in small gardens, where space is so limited that room can only be found for a few of the best. There is no border, however carefully selected its occupants may be, which will not be strengthened by the addition of a few plants. Bold clumps are as valuable for distant effect as *Kniphofias*, and are secured with as little difficulty, though somewhat more slowly.

The main flowering period is early summer, but a fair selection of sorts will probably give a prolonged flowering period. The plants never look finer than in partial shade. The colour of the rich, lustrous crimsons is deepened by shade, but this must not induce the grower to plant them immediately under large trees, especially greedy-rooted kinds like *Elms*, because it will be difficult, if not impossible, to work the soil as deeply as is desirable; and further, the tree roots will appropriate the manure.

Paeonies share with *Roses*—and, indeed, most other plants—a strong liking for good fare. They love to dip their roots far down in a deep, rich soil; and, having got them there, to keep them. Frequent disturbance, which is all to the good with that class of herbaceous plants which make



LILIUM LONGIFLORUM AND TUBEROSES IN MIXTURE. (See page 79, also Chapter XXX.)



A GOOD TREE PAEONY. (See page 212)

spreading stools with shallow roots (Michaelmas Daisies may be cited as an example), is altogether out of place with Paeonies, which do not form matted, expansive rootstocks with surface fibres, but produce strong, fleshy roots. Division is only needed every four or five years. They do well on heavy land, but by no means disdain light soil so long as plenty of decayed manure is used when planting, and provided that annual mulchings of manure are applied. Bastard trenching should be practised in order to deepen the root run, indeed, without it the manure would not do half the work of which it is capable.

Under a generous system of culture the plants will assume large proportions, consequently crowding must be carefully guarded against by thin planting. As a matter of fact, one good specimen is quite capable of producing all the effect desired at one particular spot, and it is far better, as well as more economical, to aim at an effect with one good plant than with a dozen poor ones. If, however, a clump or line is wanted, the plants may be put in a yard apart all ways.

Propagation is effected by division, but it should not be resorted to more often than is absolutely necessary, because the young plants do not make good, flowering plants under two or three years, as a rule.

The number of varieties is now so great that

there is no small difficulty in making a selection. More economical than making out special lists from the catalogues is the plan of buying the sets which specialists offer at various prices. It does not follow that the lower-priced selections will be either bad plants or poor varieties. While scarce novelties must always be expected to be dear, the price of older varieties, which are more abundant and in less demand by novelty-mongers, tends to decline, in spite of the fact that they may possess every virtue that a garden plant should have. The selection named on p. 213 is made up of such sorts.

Turning to the Tree Paeonies, the first point of difference from the herbaceous varieties that it is expedient to mention is a want of perfect hardiness. Although not to be described as tender plants, the young growths are the better for a little protection during late spring frosts. This may be provided in the form of cool stable litter. The method of propagation usually practised is also different. Pot roots of the herbaceous species such as *albiflora* and *officinalis* are grafted with scions of the Trees just below the surface, generally in August, and kept in cold frames.

Planting is best done early in autumn, as this gives the plants a chance of establishing themselves before winter. If in deep, rich soil, they may flower in the second spring, for they are mostly early bloomers, and should certainly do

so well the third season. They are sometimes grown in pots, and forced gently into bloom, but it cannot be said that they are ideal pot plants. For the garden, on the other hand, they are magnificent. Like the herbaceous section, they give the best effect when they can delve well down into a deep, moist, fertile soil. On chalk or sand they will want well feeding with liquid manure, and good mulches, to give of their best.

Good Herbaceous Paeonies.

Agnes Mary Kelway, rose and yellow.
 Alexandre Dumas, rose and cream.
 Blushing Maid, pale pink.
 Ceres, cerise.
 Crown Prince, crimson.
 Exquisite, pink.
 François Ortigat, purple.
 Princess May, cream.
 Rose d'Amour, flesh.
 Ruby Queen, red.
 Sir Henry Irving, rose.
 The Bride, white (single).
 The Sultan, maroon.

Good Tree Paeonies.

Beauty, rosy lilac.
 Captain Lambton, white.
 Don Quixote, lilac.
 Elizabeth, puce.
 General Baden-Powell, red.
 Grand Duke, flesh.
 Henry Irving, dark crimson
 James Kelway, rosy carmine
 Jean de Reszké, white.
 Lady Sarah Wilson, blush.
 Lord Roberts, white, flesh tinted.
 Snowflake, white.

A species of Paeony which has aroused a certain amount of special interest is Wittmanniana, the yellow Paeony. It is rather cream than yellow, but the stamens are yellow, and it is a distinct plant.

CHAPTER XXXII.

ON PANSIES AND VIOLAS.

WE cannot do without these lovely flowers. They bloom so long and profusely, their flowers are so pretty and bright, their habit—especially in the case of *Violas*—is so good, that they are almost indispensable.

Florists of the old school will give preference to the Pansy, on account of the great size, perfect form, and rich markings of its blossoms; but flower gardeners will centre their affections on the *Viola*, because of its bushy habit, floriferousness, and clearly defined colours.

The *Viola* is an edging and carpeting plant of the first rank, and any disposition to “improve” its flowers at the cost of its habit merits only failure. It is, however, so clearly recognised that habit stands before mere texture and marking of bloom, that it is not likely that the cross-breeders will be encouraged to go far astray. Their work hitherto has been admirable. They have given us increased size and brilliancy of flower without in any way sacrificing the habit of the plant.

Now that the Rose is being given its rightful place as a garden plant, and is no longer a mere instrument of cup hunters, Rose beds are better furnished than they once were. Violas make a charming carpet for them, and so far from doing harm, probably make full amends for what little food they abstract from the soil by checking the evaporation of moisture. It is generally better to employ them in broad bands than to patch-work small quantities of different colours in the beds.

To ensure vigorous plants, and a long flowering season, early planting should be practised. March is not too soon, as the plants are hardy, and, being of a moisture loving nature, the spring rains will do them good. Plants put in then will be in bloom early in May, and will flower almost continuously until October if the blossoms are picked regularly. Should a long spell of dry, hot weather make the plants look a little shabby, a close clipping with shears—which may embrace the older growth as well as seed pods and flowers—followed by soakings of liquid manure, or fresh compost, will start them going again, and with new shoots will come a fresh crop of flowers. The more persistent the gathering of the blossoms the longer the plants will last.

Violas may be planted up to June, but if they must perforce be put in late a showery period should be chosen, and mulching practised. The

plants will thrive in most soils, but if the land is light it will be wise to add cow manure liberally.

The large-flowered Pansies are perhaps rather exhibition than garden plants, but there are several selections of Pansies which are well worth growing in the garden, and they come true from seed. They can be had in blue, purple, chestnut, crimson, white, and yellow from most of the larger seedsmen. To get strong plants for early blooming they must be raised the previous summer, but there is no difficulty whatever in flowering them the same year from a February or March sowing in a cold frame—indeed, the author has had them in bloom in June when thus treated. If a particularly fine seedling should show itself it may be perpetuated by striking cuttings.

All Pansies and Violas are easily raised from young basal shoots, drawn off with a few rootlets attached, and inserted in sandy soil in autumn. They are hardy, but a cold frame is the best place for them. They will make little or no growth during winter, but should be looked over occasionally for brown aphids.

Splendid Varieties of Violas.

<i>White.</i>	<i>Blue.</i>
Countess of Hopetoun.	Archie Grant.
Marchioness.	Blue Bedder.
Mrs. Kinnaid.	Rolph.
Seagull.	True Blue.

Lilac and Rose.

Lilacina.
Wm. Neil.

White and Blue.

Accushla.
Blue Cloud.
Countess of Kintore.
Mrs. Chichester.

Yellow and Blue.

Duchess of Fife.
Goldfinch.

Mauve.

Duchess of Sutherland.
Duncan.
J. B. Riding.
John Quarton.

Bronze.

Bronze Kintore.
Bronze Prince.

Crimson.

Councillor Waters.
Crimson King.

Purple.

Acme.
Jackdaw.
The Mearns.

Yellow.

Ardwell Gem.
Bullion.
Mrs. E. A. Cade.
Sylvia.

Violettas (Miniature).

Blanche.
Blush Queen.
Gold Crest.
Violetta.

CHAPTER XXXIII.

ON PHLOXES.

IN their great range of height, season of flowering, and colouring, the Phloxes are almost unexampled among hardy flowers. While some forms are the neatest of rockery gems, others are the noblest of border plants. Some bloom in spring, others in summer and autumn.

While the tall, border Phloxes are poor, ineffective plants in hungry soils, they are magnificent when grown in a suitable medium. It is unfortunate that they are a little difficult to suit in respect to soil. They do not care for shallow soils on chalk, nor are they quite at home in clay. A deep loam suits them best. The author has had fair results on clay by thoroughly ameliorating it with burnt rubbish, decayed manure, and sand, especially, perhaps, with the coloured sorts. The whites have needed a good deal of nursing.

So beautiful are the plants when in health and vigour that it is well worth while to make special efforts to succeed with them. They look best in clumps of four or five plants. Specialists may

make beds of them, and they are well worth it. If the soil is a well-drained, sandy loam, and is bastard trenched and well manured, few finer beds will be seen than those filled with the Phloxes. The tall varieties should be staked.

Propagation is easily effected, either by cuttings or division. Where the plants are quite at home, and form large clumps, the latter process is advisable ; but where they are struggling for existence it is best to increase the stock by cuttings of the young shoots in spring. Even if propagation is not desired strong clumps should be divided occasionally, and the shoots thinned annually. The former prevents impoverishment of the soil, the latter ensures fine flowers.

The Phloxes have been a good deal intercrossed, but at least four sections stand out fairly clearly : (1) the annuals, varieties of *Drummondii*, which are best raised from seed in spring ; (2) the dwarf Alpines or trailers ; (3) the early summer border perennials, or *suffruticosa* section ; and (4) the late perennials, or *decussata* section.

The dwarf, spring-flowering Phloxes are charming flowers for rockwork, edgings, or the fronts of borders. *Divaricata* is a pretty lilac blue, spring-flowering species, averaging a foot high ; there are several varieties of it, including a white. *Ovata*, red, is a little taller, and also a spring bloomer. *Reptans*, violet, is a creeping plant, and flowers in spring. But the most

valuable of the dwarf, early-flowering section is certainly subulata, for not only is it pretty in itself, with its abundance of pink flowers, but it has given us a number of charming varieties, such as alba, white ; compacta, pink ; frondosa, rose ; grandiflora, pink with crimson eye ; Little Dot, pale lilac ; Newry Seedling, lilac ; The Bride, white with rose eye ; and Vivid, rose.

The early autumn border Phloxes, most of which grow from 2 to 3 feet high, are extremely useful, as they come into bloom as the spring sorts go off. Six good varieties are Attraction, white, red eye ; James Hunter, deep pink ; Magnificence, rose, crimson eye ; Miss Lingard, white, with lilac eye ; Mrs. Forbes, white ; and The Shah, purplish red.

The late varieties follow, and carry on the display until late in September. It is in this section that cross fertilisation is most active, and consequently the annual flow of novelties is strong. Of established sorts, of proved merit, the following may be grown :

Archibald Forbes, salmon rose, crimson eye ; L'Aiglon, rosy carmine, dark eye ; Coquelicot, orange scarlet, purple centre, old, but one of the best ; Espérance, mauve, white centre ; Le Mahdi, violet and blue ; Le Siècle, salmon rose, lilac centre ; Mrs. E. H. Jenkins, white ; Mrs. Oliver, salmon ; Papillon, lilac ; Rossignol, rosy mauve, white centre ; and Tapis Blanc, white.

CHAPTER XXXIV.

ON ROSES.

A NEW era has dawned for those who love good and beautiful garden Roses. It was ushered in in a manner almost dramatic. A seafaring man brought from the Far East a singular Rose. It had small, rosette-like flowers, borne in great clusters, and of the richest crimson. Its foliage was small and shining, borne on long, thick canes, which bespoke the rudest vigour. The seafarer did not know that he had a floral treasure. He probably thought no more of it than he would have done of a green parrot. It passed from his hands into others', and still was regarded, if not without admiration, at all events without insight. Then the inevitable happened. A plant so extraordinary could not be bandied about the country for ever without arousing attention. A man came along who combined great knowledge of Roses with trained commercial instincts. He saw, he bought, he propagated, and in 1893 "Turner's Crimson Rambler" was introduced to the Rose world.

There never was a more remarkable example of the completeness with which Nature can sometimes remedy the short-sightedness of mankind than the revolution effected by this plant. Numerous societies devoted to the Rose existed, but their influence was confined within very narrow bounds—those of the show tent. They did little or nothing for the Rose as a garden flower. Their work was good in its own limits, but it lacked breadth of view. The narrowness of outlook which invariably distinguishes specialists—at least in the gardening world—was conspicuous in their operations. The result was that the hall-mark of supreme excellence became attached to varieties which, while undeniably beautiful as exhibition flowers when specially grown and dressed, were of no value for the garden. And so a false standard grew up. Useless Roses were set on a pinnacle, and men without the remotest idea of beautifying a garden were elevated into leading rosarians.

For a long time the public endured this sort of thing. It duly planted expensive varieties which proved to be worthless, and it gave unstinting hero worship to the great men of the Rose world. But its gardens remained bare of Roses, except for a week or two in the year. It was the advent of Crimson Rambler, with all its glorious garden possibilities, which altered this. And there were no half measures about



A CLUMP (TWO PLANTS ONLY) OF THE BEAUTIFUL WHITE ROSE FRAU KARL DRUSCHKI. (See page 228.)



A BED OF THE YELLOW POLYANTHA ROSE ELECTR.

the change. Garden lovers flung forth the pampered favourites of the show board, and would have given similar shrift to the leading "rosarians" themselves had not the latter mended their ways. Of course, they yielded tardily, reluctantly, but public opinion was so overwhelming that they were compelled to give a grudging assent to the demand that garden Roses—true garden Roses—should henceforth be recognised as equally worthy of official recognition with show sorts.

The prodigious success of Crimson Rambler led to the introduction of a large number of other brilliant and free flowering Roses. Arches, porches, arbours, pergolas, fences, banks were covered with the brilliant trusses of the new favourites. Dorothy Perkins (second only in popularity to Crimson Rambler), Euphrosyne, Ards Rover, Psyche, Leuchtstern, and Carmine Pillar, with dwarfer, yet still vigorous, varieties like Bardou Job, Grüss an Teplitz, and Alister Stella Gray, were soon spreading fast. The beautiful Penzance Briers grew more rapidly in favour. The invaluable Wichuraiana varieties rambed over stumps and banks. Old, half-forgotten but beautiful Roses like *Félicité Perpétue* and Bennett's Seedling were again brought into the sunshine of popularity. Free flowering, if small-flowered, Roses such as Fellenberg, Electra, and The Dawson were considered worthy of introduction. Moreover, the rank and file

of Teas and Hybrid Teas were carefully tested, to yield varieties calculated, by their freedom of growth and floriferousness, to give good garden effects.

The net result of this great movement in the way of popularising decorative Roses has been to add immensely to the beauty of the garden. Instead of having Hybrid Perpetuals blooming merely for a week or two in July and September, we have rambling, creeping, and bedding Roses of the best types in flower continuously for many months. Material for the house vases has increased in proportion.

Here at length, then, we find the Rose playing that dominating part in the flower garden which its proud position as the Queen of flowers demands. In some instances poor culture leads to disappointment; in others supports of too artificial a nature impair the effect. All Roses appreciate substantial soil, liberal feeding, moisture, sunshine, and brisk breezes. Double dug and freely manured soil is indispensable. Root drought, heavy shade, and stagnant air are all bad. Even Crimson Rambler, with all its marvellous vigour, will not thrive in a dry place.

The show grower's thoroughness in the way of pruning must not be practised with strong-caned Garden Roses. Ramblers, Penzance Briers, and pillar Roses generally need the old canes removed when they become barkbound, but younger

wood only needs its soft, unripe tips to be cut away. It must be remembered that most of these Roses, like dear old Maréchal Niel and William Allen Richardson, produce their flowers on outgrowths from the ripened canes, and hard pruning would therefore be wasteful. The only case for cutting back is when a thicket of canes exists. In such cases a few of the strongest should be left untouched, others shortened to two-thirds of their length, and the remainder to one-third. This produces perfect pyramids of bloom right to the ground. *Félicité Perpétue*, and most of the lovely Penzance Briers (but not Lord and Lady Penzance) thrive under this treatment.

Wire arches are not so becoming as rustic ones for supporting Roses, but near towns they are generally employed, on account of their cheapness, and the ease with which they can be procured at any ironmonger's. If necessity compels their use, specially strong plants should be chosen, so that the wire may be clothed as quickly as possible.

Rustic arches are procurable ready made, and if a well-finished one is procured it looks very well. It may cost a little more than a wire arch, but it will give more pleasure.

In country districts the Rose grower will probably make his own arches. The best material he can get for small poles is Larch, as it is straight,

Potatoes.—Our juvenile of eighty-two was pegging away with infinite satisfaction to himself, and as fast as he cleaned the ground it was planted. [The endurance of this amazing Ancient excited the envy of the author, who, on the strength of certain athletic successes, had imagined his muscles to be of steel. But he could not ply spade day after day without stiffness, whereas the aged one never wearied. The champion oarsmen, record runners, and crack batsmen create a stir, but for sheer endurance give the author a Kentish labourer who has wielded a “spud” in fruit and hop gardens for many years. He is a piece of tireless machinery.] The Potatoes went in by the middle of April, and were well “hilled” with loose earth. Wilkins had a theory for cutting off a slice from the heel of each tuber, which helped it to decay after it had started the fresh crop, and was allowed to indulge after Eunice’s fear that all the new Potatoes would come up with slices off their heels had been removed.

Seakale.—Pieces of Seakale root, as long as one’s hand and as thick as a little finger, were planted in rows 18 inches apart. [The following February we heaped ashes over these, and had some very nice, clean Seakale. This way of forcing costs nothing, because you simply save the ashes from the house fires, and after the forcing is over they are spread on the adjacent walks.]

Tomatoes.—Sturdy little plants, with two cut leaves each, were put 6 inches apart in boxes, and stood in a frame, to harden and strengthen against planting out time. No tender, “miffy” plants for Wilkins. [“Miffy” is the gardener’s term for plants which do not grow

strongly and freely. Can it have come from the German "müffig"—sullen, sulky? If not, from what?]

Old Fruit Trees.—It is a pity that old trees bear so much fruit, because it makes people reluctant to part with them. Some of these hoary old fellows have a way of looking very picturesque in spring, and making a great show of producing an immense quantity of fruit in autumn, which is no earthly use to anybody, owing to its being nearly all core and very little flesh (and bad at that). [We sent a basket of fruit from one of our trees to a maternal aunt from whom Eunice had "expectations," and relations were very strained for a long time afterwards. We understood why, when we had tasted the fruit ourselves.] We removed the upper forks from some of the worst trees, and planted *Clematis montana* against the boles. Others we grafted by slitting the bark down the side of the cut-back branches, raising it, and slipping in shoots about 4 inches long, neatly cut to fit. To exclude air, Wilkins compounded a brew of resin, beeswax, and tallow, which set hard as fast as he brushed it on.

Melons.—A new frame had now arrived, so a fresh hot-bed was made up for it. The intention had been to grow Cucumbers in it, but the reflection that we were rather short of fruit, and that Cucumbers would grow very well in the garden, caused a change to be made. A strong plant, with its top nipped out, was planted in the middle of the frame, and soon pushed shoots, one of which was taken towards each corner of the frame, and its tip pinched off when it got to the end of its journey—a simple plan, and a good, for we got a very nice lot of fruit.

Birds and Fruit Buds.—We had not been gardening long before we revised our ideas about birds. To the end Eunice begged the author not to kill them, and he promised, because his feelings were so overwrought that one death would have afforded him no sort of satisfaction; he would have wanted to restore the feathered corpses to life and kill them all over again. Birds are charming when sitting on their nests in photographs in Kearton's books, but nowhere else. In gardens they do not sit in sweet simplicity on their nests and be snapped by cameras; they rampage round amongst the fruit. They begin by tearing off the buds in spring, and what escape them then and develop fruit they gulp down eagerly in the summer. Some of them eat insects, others don't—or only a casual few by way of whetting their appetites for more fruit, and by way of deceiving the credulous folk (not being fruit growers) who believe in them. Of course, a house sparrow is carnivorous sometimes, so is a blackbird, so is a finch. Birds are quite capable of adapting themselves to circumstances. And they are cunning—oh, so cunning! (The author begs that irate bird lovers will not write infuriated letters to him on reading these lines. He doesn't kill birds—he doesn't, really. Indeed, he loves them—especially in Kearton's photographs.) The only thing is to net, and that needs to be done with skill. Hoary old blackbirds exist that have given their lives to the study of getting under fruit nets.

MAY.

May is one of the happiest months of the year in the garden, because it is then that one begins to see

promise of a real reward for all the hard preparatory work of winter. The herbaceous borders are already bright with Arabises, Aubrietias, the ruddy stems of Paeonies, the soft greenery and first opening flowers of Pyrethrums, and, above all, the glorious colours of Cottage Tulips. Then the Rose beds are filling fast, and one can even see an odd bud here and there among the tinted leaves and warm stems of the Teas. A tender veil of greenery is being spread over the shrubby borders. Altogether, the garden shows life, and life is hope.

Rock Cresses and Forget-me-nots.—We sowed all these for the following spring. There is no weather like the warm days and cool nights of May for starting biennials and perennials from seed for another year. One makes a nice sowing bed for these pretty things, sprinkles the seed in drills far enough apart to run a hoe between for keeping down weeds, thins a little, and in showery weather, a few weeks later, sets the young plants out a few inches apart in a nursery bed, where they will be happy and comfortable till the autumn beds, borders, and rockeries cry out for them.

Canterbury Bells, Sweet Williams, and Wallflowers.—It is the same with these, only that they want a little more room, being of larger growth. We learned to use Canterbury Bells and Sweet Williams in the winter flower beds, for their greenery enlivens the bare earth.

Coloured Primroses and Polyanthuses.—Of course one can propagate these fast enough by division when one has plants to work on, but all the same it is well to sow a packet of fresh seed every year in the hope of getting new colours.

Violas.—By a misunderstanding, we got no plants until May was well advanced, and we put them in with fear and trembling, lest the hot sun should prevent their getting hold. By dint of watering, shading, and soil stirring, we got them started, and thenceforward all was plain sailing. [But it is not plain sailing if you neglect to pick the flowers, for nothing throws them quicker out of bloom than for the flowers to fade on the plants.]

Dahlias.—When the end of the month came these were planted. After a struggle with Wilkins, within whom old memories stirred, with the result that he wanted all the beds filled with show varieties, we squeezed in a good number of Cactus and Pompon sorts. Wilkins talked of old Dahlia giants—Glasscock, Mist, Dean, Rawlings, Hibberd, Keynes, and others—and told us of the wondrous blooms they used to stage at the Crystal Palace in days gone by. Ah! Dahlias were Dahlias in those days. He minded the first Cactus sort being shown—a scarlet called *Juarezii*—and how, with a proper contempt, the old heroes sniffed at it disdainfully. Such a name, too! Wasn't it enough to kill any flower? This departure into names was Wilkins's undoing, for the alert Eunice strung off the names of the Cactus varieties she had set her heart on—Peace, Ringdove, Coronation, Britannia, Spotless Queen. Were not these adorable names, pretty, and patriotic to boot? As for the Pompons, "Just listen now, Wilkins. Buttercup, Guiding Star, Rosebud, Sunny Daybreak—don't you want to grow them for their names alone?" Wilkins was conquered, and the author retired to snigger. She had a way with her, had Eunice, when she liked!

Verbenas.—There was no struggle over these, for we were all of a mind. A small round bed was cut on the lawn, and some purchased seedlings planted. Dear old favourites! How we watched them 'spread and spread, and bloom and bloom! We had to peg the shoots down, they grew so strongly.

Ivy-leaved Geraniums.—From many a passing reference, uttered with wistfulness of eye, we knew that the Henry Jacoby bed at The Highlands still lingered in Wilkins's thoughts. He could not forget the old Zonals, the flowers of his youth. There was Master Christine, and Omfail (this turned out to be Omphale), and Mrs. Pollock, and Crystal Palace Gem, and Flower of Spring, and West Brighton Gem, and Henry Cox. They were the stars of the garden, and the men who brought them out made fortunes out of them. Didn't the author remember the excitement caused by Mrs. Pollock? The whole country was ablaze. Talk of Sayers and Heenan! Eunice felt for Wilkins, but she fought against the eclipsed stars of past times as desperately as ever little Tom did against the big fellow from the States. The Ivy-leaved Geraniums were a sort of compromise, and it was not regretted. After all, there was grace about their growth. And they did much to compensate Wilkins for his defeat over the Zonals. Anyway, he assumed an aspect of perfect contentment. But that was Wilkins. He had the faults all of his craft have—egotism, a scarce-concealed pity for the ignorance of all terrestrial beings not trained to gardening, an easy assumption that all his employer's plants were his own—but he was ever cheerful, earnest, and full of a delightful devotion to his duties. Why don't people handle their gardeners better?

Why don't they overlook the little faults in consideration of the great virtues? What a tragedy, after all, was the life of this poor fellow, flung ruthlessly out of employment in the evening of his days owing to a little error, born of solicitude for his master's favourite flower! Most of his savings gone, too, while he had been seeking the fresh post which is so hard to find for a gardener when his hair has begun to whiten. From Wilkins's spotlessly clean and tidy cottage the towers of The Highlands could be seen. He sometimes gazed towards them wistfully, but never in anger. "He was that fond o' Begonias, you see, sir, I couldn't help it. But maybe the Missus wanted a younger and smarter man."

The Kitchen Garden.—It was delightful to see things growing. Already Eunice was talking of salad dressings, although the only salad vegetables we had at present were Lettuces of the size of children's shuttlecocks, and Onions no bigger than needles. Still, as she said, salads had to grow, the same as children.

Scarlet Runners.—Eunice had been wanting to sow these for several weeks past, but Wilkins barred the way, and the middle of May had passed before he gave consent. "You can't make a Scarlet Runner a hardy plant, any more than you can make a woman a gardener—begging your pardon, marm. I was thinking of my Eliza, who's been very aggravating all her life in wanting things before they are ready, and as like as not to take up prize Potatoes an' cook 'em if your back's turned for half an hour just before the show."

Beetroot.—We sowed long Beetroot too, as a succession to the round sort sown in April. "Long Beet, long nights," Wilkins said, which I understood to be his

way of saying that the long-rooted Beet was best for the winter.

Celery.—The Ancient was not to be kept away when the work of making Celery trenches began. He had cleared all the waste ground now, and placed the rough stuff from it in a long bank, destined—after the herbage had rotted—to be planted with creeping Roses, Ivy-leaved Geraniums, and Nasturtiums. He was offered a light job of painting trelliswork, but, declaring that he could “make a Salary träanch with anybody yet, no bounds where dey come fräam,” proceeded to set his line, cut the soil, and build a bank with the soil thrown out. But stupefaction fell upon the Ancient when he was asked his choice between superphosphate of lime and sulphate of potash as a fertiliser, and he warmly declared that they must be manures out of the Zoo, for there warn’t no animals o’ them names on any farms *he* knowed on. Dire were the forebodings of evil which he indulged in over this new-fangled style of Celery manuring.

Herbs.—A little garden of aromatic herbs was one of Eunice’s strongest fancies. There was no difficulty about Mint, Sage, and Thyme, for Wilkins got divisions of Mint and Thyme, and cuttings of Sage, from a friend. For others, however, he had to look farther afield. We got seed of bush and sweet Basil, Sweet Marjoram, and Savory, and after some trouble (for most florists do not seem to stock pot herbs) we got plants of Tarragon, Rosemary, and Pennyroyal. These being many more than she was ever likely to use, Eunice expressed herself fairly satisfied.

New Potatoes were talked of when it was seen that

the plants had got their sixth inch of height, but earthing up had to intervene before produce for the table could be dug.

The Fruit Garden.—We had encouragement here in the Strawberries, in the progress of which we had some consolation for the disappointment we had suffered in consequence of the onslaught of the birds on our Gooseberry buds. After standing almost still for several weeks, they now began to grow with great rapidity. The Raspberries, too, were beginning to push up shoots. What pleased us most, however, were the cordon trees, which were now full of bloom, and giving promise of a bountiful crop.

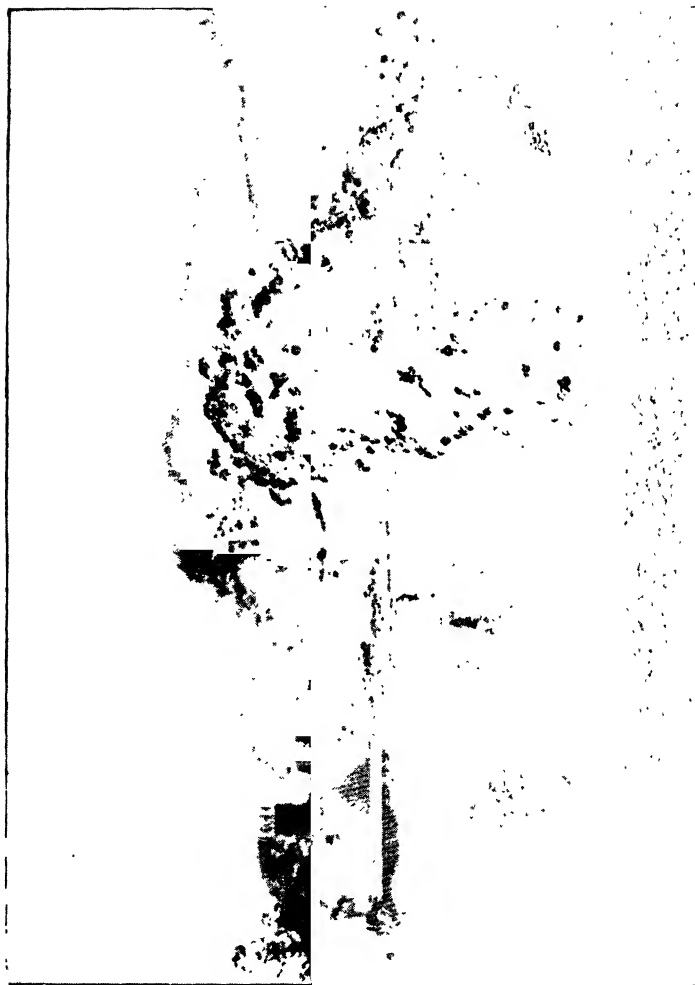
JUNE.

There is joy unspeakable in the garden in June. The Rose garden is full of foliage, and buds are opening here and there. The arches and pergola, which have hitherto awakened painful memories of scaffolding, are now nearly hidden in green leaves. The Sweet Peas are halfway up the sticks, and the first buds are appearing. The green of the young Ivy leaves is very tender on walls and banks. The level of the herbaceous borders has been steadily rising, and the taller plants are now breast high. There is quite a sensible amount of bloom. Pinks are out. Double Daisies are standing up in their rows as stiffly as soldiers on parade. Pyrethrums are throwing up their pretty flowers in abundance. The Leopard's Banes are full of their cheerful yellow blossoms. The huge fat buds on the Paeonies are showing colour, and awaken the most lively anticipation of coming glory. The Clematis on the summerhouse has nearly



Photo : Mr. A. C. Leney.

ROSE GROWING ON AN OLD TREE AT THE GARDEN HOUSE, SALTWOOD.



A COMBINED PILLAR AND ARCH OF ROSES

reached the top, and it is very pleasant to sit within and see the slender shoots gently swaying in the sun warmed breeze. The nights are delicious, with their perfumed coolness long drawn out ; and almost more so are the dawns, with their lovely lights on the green paths.

Arum Lilies.—It was a habit of Eunice's to prime herself with gardening calendars, and then ask Wilkins, with an air that implied possession of whole tomes of horticultural lore, if such and such seasonable operations were in hand. The author had an idea that this impressed Wilkins for some time ; at all events, he discussed things with a grave and even concerned air, as though recognising that legitimate professional points had been raised. Unfortunately, however, Eunice got her plants mixed up, and the secret was out. Thus, she asked Wilkins one day if the Arum Lilies were planted out yet. His air of surprise should have warned her, but she did not observe it. "We're so fond of Lilies, you know, Wilkins, and I do so love those great striped ones with the scented flowers." "Auratums they are, marm ; not Arums. You grow Arums in a conservatory—at least, I mean most rightly in a room window." Wilkins made his correction very hastily, for he had caught a warning look from the author, by whom he had been specially warned not to put anything about glasshouses into Eunice's pretty little head for another year at least, for financial reasons. "Of course I meant auratums," fibbed Eunice, and then, realising that her ground was insecure, she pounced down on the word conservatory. "I don't see why we shouldn't have Arum Lilies and auratum Lilies as well," she said gravely ; "and if it's only a conservatory that stands in the

way——” She looked at the author with a reproachful air, plainly asking why a conservatory had not been previously provided for the special purpose of enabling her to avoid this slip over the two kinds of Lily. “I—I will write for estimates, dear,” said the author meekly. [Future efforts to forget this promise were thwarted, and the only relief to his feelings that he got was in surreptitiously burning the calendars which had hitherto afforded him such diversion.]

Flower Beds.—We had a sort of “spring cleaning” with the flower beds, lifting out the bulbs, and putting in things for summer and autumn bloom. That plant of ill-memory for him, the Begonia, still held its place in Wilkins’s heart, and we filled a whole bed with plants which had been growing close together in boxes in the shelter of a cold frame. His summary dismissal had not destroyed Wilkins’s loyalty to his old master. “It hurt him more than it did me, sir, I lay, if the truth was known,” he said. “He kep’ out of my way after I had the notice, and when I met him accidental just before I left, what do you think he did, sir? Why, he came up and shook hands with me, and said, ‘God bless you, Wilkins; I—I——’ and then he went off with tears in his eyes.” “Tears of shame, let us hope,” growled the author. “No, sir, no! What could he do, poor old gentleman? He that ill and shaky, and the wilful young missus that would have her own way in everything? No, no, sir; you mustn’t say that, please. He was a rare good master to me for many a long year.”

Dahlias were planted the first week in the month.

Cannas.—A group of Cannas at the Temple flower show had won Eunice’s heart. It was a flower she had

never before seen, and the beautiful colours, in association with handsome green and brown leaves, threw her into a state of feverish excitement. Scarcely knowing what she did, she had ordered the whole show group to be sent down next day. The florist's young man had raised his hat by the very edge of the brim in acknowledging the order (all florists' assistants salute in this way), and when Eunice had flown to the other end of the group to take another look, had winked solemnly at the author and said: "That's the seventh lady that's ordered the lot, sir, within the hour. Shall I send two dozen young plants? Very good, sir. Address, please? If the firm should ask for references, sir, shall I——? Thank you!" We now planted these two dozen young Cannas in state, with some plants of *Salpiglossis* among them to take off the stiffness.

A Rose Enemy.—The Roses were strong and hearty, and every day more and more flowers opened, but a tiresome maggot began to curl the leaves, and had to be subdued by tedious hand picking.

Weeds on the Walks.—There was trouble, too, with the gravel, for some showery days brought a great rush of weeds. A watering of weed killer browned them over, and they troubled us no more.

The Lawn.—We were glad to see plants growing so fast, but not so happy over the progress of the grass on the lawn, which could hardly be kept down with one mowing a week. Cutting was not the end of it, either, for rolling was necessary, Wilkins said, and the edges had to be clipped as regularly as the lawn was mown. [One sometimes hears people speak of "having a large lawn to keep down labour." But does a lawn mean less

labour than an equal area of cultivated garden? The author doubts it. If dressing, sweeping, mowing, rolling, and edge clipping are all taken into consideration, grass probably takes up as much time as flowers. To reduce labour considerably one must plant evergreen shrubs.]

The Kitchen Garden.—"Asparagus cutting must now cease for the season," read Eunice from her calendar. [It was the last one unburned, and it shared the fate of the others on the day that the bill for the new conservatory came in.] "That does not affect us, because, for some silly reason which nobody understands, we can't even begin to cut ours." [When the author interjected that both he and Wilkins understood perfectly well Eunice hurriedly read on.] "Watch for black fly in Broad Beans, and pinch out the tops when the flowers begin to set. That'll do; come on and find Wilkins." That worthy admitted that the flowers on our Broad Beans *had* set, and that the hour for pinching the tops had come. And it was done accordingly. We made another sowing of French Beans, rammed the soil close between the Carrots to keep away maggots, and planted Celery in the trenches and shaded them with newspapers until such time as they should have got well rooted. We had our first salad one joyous day in the Rose month. It was a somewhat meagre one, consisting of a rather attenuated Lettuce, Mustard and Cress, and a few Onion striplings, but it was an earnest of good things to come. The sight of Peas in pod was a cheerful one, and encouraged us to make one more sowing "for the Christmas supply, you know, Wilkins," explained Eunice, who had got confused with Pears; and Wilkins, after looking rather startled, said, "Quite so, marm," and



THE BEAUTIFUL WHITE FREE-FLOWERING ROSE FÉLICITÉ PERPÉTUE ONE OF THE BEST FOR PILARS



CRIMSON RAMBLER ROSE OVER AN OLD WELL AT OLD WARDEN PARK, BIGGLESWADE

coughed discreetly behind his hand. We planted Tomatoes. In default of a wall we made a row of strong stakes, four feet high and two feet apart, and put out a plant to each. We planted a Vegetable Marrow on a piece of well-manured ground, and—last but greatest—we dug our first dish of Potatoes on the twenty-third of the month.

The Fruit Garden.—It had been a much debated question whether we should get any Strawberries the first summer, and Wilkins had voted against it, adding, by way of consolation, that the plants would be all the better next year. This had by no means satisfied Eunice, who argued that if it was natural for a Strawberry plant to bear Strawberries (and if it wasn't it had no right to be called a Strawberry at all; that was all *she* had got to say), it would certainly be better if it bore fruit this year than if it didn't. Her triumph was complete when, after signally worsting Wilkins in argument (according to her full conviction) on this point, the Strawberries crowned their extraordinarily rapid growth by throwing up a vigorous forest of flower trusses. Wilkins took his defeat in excellent part, and spread straw between the rows to keep the earth from the fruit. We had a pleasant surprise, too, with the Gooseberries, which produced a sprinkling of berries in spite of the mauling they had had from the birds, and of the fact that they were still young and only half developed bushes. There being a good show of Melon flowers out, we cross fertilised them. The cordon trees on the wires beside the path had set fruit freely, but we had thinned it down severely, in order to avoid overstraining the young and imperfectly established trees. Each was

allowed six fruits, and no more. With the ever-present risk of the destruction of the crop by birds we felt compelled to fix a framework of supports to sustain fish netting over each line of trees. True, the fruits were hard and green as yet, but we had set our hearts on dessert of our own growing, and were not disposed to take risks.

JULY.

The Garden is at the halfway stage, germination accomplished, fruition fast approaching. The borders have attained to their maximum of fulness, the shrubs have thickened out, the creepers have extended. The period of eagerness, of hope, of expectancy, is past. We have reached the stage of accomplishment, if not of maturity, and we pause, and note our progress. But we do not draw up a profit and loss account, and, reducing things to the vulgar basis of pounds, shillings, and pence, ask ourselves if it has *paid*. The garden is one of ourselves. Should we have a profit and loss account in the sunshine, in the air we breathe? We do not reduce the perfume of our flowers to a commercial basis, like bottles of manufactured scents. The plants have come into our lives as children might do, and we love them because they are a part of us.

In the spring time there is always something strange about a garden, even when one has known it for many years. It comes back to us from its winter sleep as a friend might do who in the past enjoyed our intimacy, but with whom we have lost touch a little in the lapse of years. Are his tastes, are ours, the same as of yore? Will there be the same sympathy between us? Has he become a little embittered with the sharpness of

life, or is he as kind and affectionate as he used to be ? We come into association again with a faint element of fear, of shyness. We are willing to make advances, but dare not go too far, in case of a rebuff. As time passes we come together again, without effort, without consciousness. There is an invisible link between us, which has never been broken, and which now draws us close. Soon we feel the warm and moving impulse of perfect love and understanding. Our lives are blended once again.

We spend long, happy hours in the garden during July. Even if work calls us in the daytime, there are the early morning and the evening hours. The volume of love-song which the birds pour forth has diminished a little in the force of its passionate rapture, but it is still strong enough to wake us at the very break of dawn. And we go forth gladly, loth to lose a single one of the golden moments of summer.

The Rose Garden.—It was a wise voice which bade us make this garden. As we gaze on the tall columns, fleecy with soft folds of white, ripe with warm crimson, sparkling with pink and carmine, we can hardly realise that all this beauty has come to us in five short months. And the beds of dwarfs are now in full glory. They give us armfuls of flowers every day.

Sweet Peas.—These still climb on, but buds have turned to blossoms, and still more buds come. July is a crucial month with Sweet Peas. You must cut, and cut again, if you would have them grow on into the autumn. A few days of podding in July drought will give them a check from which they will never recover. We cut shoots as well as flowers, thinning them freely

when they threatened to become crowded. Our want was clear shoots, with long, stiff flower stems.

More Pinks.—Our Mrs. Sinkins and Ernest Ladhams had won all our hearts, so free of bloom, so sweet, so altogether charming for cutting were they. It was therefore a painful shock to find that a night attack from rabbits had brought destruction to many of them. We looked to the fence wire, found the weak spot, and mended it. The passion of rabbits for Pinks will draw the shy, suspicious creatures to the garden even in daylight. In order to replenish the stock we pulled young shoots out of their sockets, trimmed off the lower leaves, and pressed them into a prepared bed of fine, sandy, moist soil.

The Dahlias were now growing rampantly, and in fear of too thick and crowded a growth we thinned the side shoots freely, leaving no more than six branches to each plant.

The Flower Beds.—In a long, dry spell the plants began to show signs of suffering, slight at first, but certain to grow more marked as time passed. We checked it by hoeing well between the plants, and then spreading over the soil a coating (what gardeners term a "mulch") of short manure.

[It is the first faint sign of distress that should be acted on; do not wait for the wholesale yellowing of leaves and fading of flowers. The gardener can check an evil that is only in its infancy, but he cannot put a dead leaf on a plant again. It is just this little watchfulness in dry spells that means the difference between weeks of beauty and an early collapse.]

Violas.—These, too, were showing signs of wear.

With a kind cruelty we cut them over sharply—buds, flowers, and leaves—then spread manure amongst them. They were flowerless for perhaps a fortnight, then more buds came, and from that time until the autumn we had bloom.

Pentstemons.—Among a host of things that Wilkins had raised from seed in a frame in winter were some Pentstemons. They were observed but casually at first, for raising seedlings was a passion with him. They lay about the place in boxes of all shapes and sizes, some of which were huddled in heaps, others dropped here and there, as though he had started across the garden with them to plant them somewhere, been overtaken with an idea to plant something else instead, and summarily dropped them. The box of Pentstemons spent a period of probation in one of the huddles, then another alongside a walk, and finally got its contents planted in a bed. We soon realised that we had a treasure. The plants grew rapidly, and threw up stems laden with beautiful bells. The colours were glorious. Among those that we admired the most were flowers the external tube of which was brilliant rose, carmine, or magenta, and the throat purest, stainless white. We marked the best of them for increase by cuttings later on.

The Herbaceous Borders.—There was much work to be done, and many beautiful things to see. Some of the plants developed an offensive hooligan nature, crowding and bullying their smaller neighbours. They were dealt with in the only way hooligan nature can appreciate, by *force majeure*. They were thinned and tied—held in necessary bondage. When tied with judgment they formed objects of no mean beauty.

The Phloxes.—Some chosen varieties of tall border Phloxes afforded us much pleasure this golden month of July. In spite of the fact that these splendid plants grew from two to four feet high, they must be kept, we found, towards the front of the border. Here, indeed, is an example of the folly of arranging regular tiers of border plants, dwarf in front, medium in the centre, tall at the back. Height is not everything, spread of branches is as much, or more. In spite of its height, the Phlox is essentially a "small" plant—in the same sense as a Tomato is. It flowers on upright, slender stems. To put it at the back of a mixed border is to put it almost out of sight. The colours are very winning. Where shall we find anything softer than the finer shades, or more brilliant than the brighter ones?

The Vegetable Garden.—Pea foliage is very liable to lose its freshness during a spell of hot weather in July, one finds, and loss of colour in the leaves affects the pods, which go off very quickly. If full the seeds harden; if empty, the seeds do not swell. We found a way to check this loss of tone, and that was to pour a good soaking of liquid manure along the rows, and instantly cover with dry earth or short manure, to check evaporation. [This never fails, so long as it is done directly the faintest trace of greyiness is seen in the leaves. It is useless, however, if the foliage once gets mildewed badly.]

Dwarfing Scarlet Runners.—A gardening friend led us on, by specious arguments, to keep some of our Scarlet Runners dwarf. Most of the market growers did it, and was not that good enough for us? Think of the saving of poles, time of training, and the like! Well,

we thought of it. We obliged by dwarfing half a row. We made the "saving of poles" with a cheerful heart, but were not so much impressed with "time of training." It does not take long to train a Scarlet Runner. Give it a pole, and it will do its own training, with, at the most, one bit of coaxing. Then, you can't keep a row of Scarlet Runners dwarf without cutting back the twiners, and that takes time, if only a little. It is results that tell, after all, and our pole Runners are promising best. [They not only "promised" but performed best. Dwarfed Runners form a semi-bush, and fail to yield the splendid clusters of large pods got from good pole rows. Besides, may we not consider beauty? The trained Runner may be utilised as an ornamental object with considerable effect.]

Vegetables for Winter and Spring.—It is pleasant to look ahead in gardening during the winter and the spring, because one can then invoke visions of blue skies and gay gardens; but it is not so cheerful to follow the process in the summer. Why look ahead, when the act brings thoughts of blizzards and bare ground? Why not be satisfied with the present, with its sunshine and its perfume? Avaunt, insidious suggestion! We dare not dally with temptation. The future must be thought of. If we cannot at first do it cheerfully, let us reconcile ourselves to it by thinking of the weak spots in our garden of the present, and glorying in the added charm which it will have when they are remedied. Winter has got to come, whether we welcome it or no, so let us put on a cheerful face, and pretend that looking forward is pleasant. It may help us if we can think of our dinners. Do we want dinners in winter? In truth

we do. And what more agreeable an adjunct than tender Brussels Sprouts, or delicious Broccoli, or mellow, melting Savoy? All these things we may have by planting in early summer, from seed sown in spring. The plants get hold best if put in just after a shower.

And Cabbages for the Spring.—Does not, too, the prospect of a young, marrowy Cabbage, fresh and crisp from the garden on the first day of spring, whet one's appetite? If it does not now, with green Peas abundant, it will when the time comes. So, at the end of July, we sow seeds of Cabbage for the spring.

Disease in the Potatoes.—Insects and diseases are the bane of the gardener. One kind or another worries nearly every crop he grows. If he were to evolve an entirely new plant, in the course of a year or two some particular pest would appear whose one mission in life was to eat up or otherwise dispose of it. Wilkins took a special interest in diseases—so much so, in fact, that he rather enjoyed finding them and explaining their structure and operations to Eunice. Now, mid-July brought with it some heavy sea fogs (the garden of the Garden Year is only four miles from the sea), and almost immediately the Potato foliage became affected with brown blotches. Jubilantly depressed, Wilkins produced specimens of affected leaves, and reminded us of a prophecy of his (which nobody remembered hearing before), (1) that we should have sea fogs, (2) that Potato disease would accompany them. But let us do Wilkins justice; if he took pleasure in seeing the disease come, he equally enjoyed getting rid of it again. We got blue-stone, lime, and soft soap, mixed a pound of each in ten gallons of water, and sprayed the stuff on within

twenty-four hours of the disease appearing. The spread ceased, and a second spraying a fortnight after saw the end of the trouble.

The Fruit Garden.—We were in high feather over our first Strawberries. Like the early salad, they were not distinguished for abundance, but who wants to eat home grown Strawberries by the ton? Is it not quality which appeals, and not quantity? We assured ourselves that it was, but feeling that another year we could do with just a few more (for we contemplated inviting our friends to a Strawberry feast), we pegged down the little plantlets that formed on the runners into small pots.

An Early Apple.—One of our Apples, named Gladstone, proved to be a very precocious variety, and there were nice eatable fruits of it before July was quite out. Not big, of course! Oh, no! Bulk makes no appeal to us.

AUGUST.

From our eyrie on the hillside we saw long streams of char-a-bancs, motor-wagonettes, flies, and other public conveyances pass through the village street below. The folk in them looked very flushed and dusty. We knew then that the holiday season had begun. When people pay famine prices for seaside lodgings in August, why do they proceed to spend three parts of their time driving along the glaring roads to outlying villages? Why don't they take lodgings in the villages themselves, and so save money and dusty drives? Probably there is no answer to these questions. It is a peculiarity people have, apparently, and is unexplainable. Village gardens often look very nice in August, and if the countryside

is-browning a little, it remains pleasant. Does some suspicious townsman murmur "contaminated water"? Well, many of the villages lying round the great seaside resorts now have water from the same systems as the towns themselves, and their names can easily be ascertained on inquiry. It was because we joyed so deeply in our own garden that we felt so sorry for those packed, dusty people in the char-a-bancs, hurrying with so much discomfort from the "apartments" on which they had spent the better part of a year's savings.

August Flowers in Cottage and Other Gardens.—Ten-Week Stocks are good summer flowers, provided they are double. Singles are no use to anyone. The author has heard disappointed amateurs declare that Stocks always refuse to come double in their gardens, although nearly every plant is double in the cottage plots. One might imagine from this that the Stock is a plant of democratic views, but the real matter is the strain of seed. Some strains will always give a large proportion (say 80 per cent). of doubles, whether in the tinker's garden or the squire's. Others cannot be relied upon. We planted our bed of Stocks thickly, and directly a flower showed single we ejected the offending plant. Those left made a beautiful bed, and an envious friend, who saw the bed a short time after the ejection, broke out into a fume. "Half mine single, and every one of yours double!" The cottager is often great with Asters too, and flowers them better than his bigger neighbours. This may be partly a question of soil, which some people make too rich. The author knows of (and imitates) an ingenious cottager who adds wood

ashes and mortar rubbish to his Aster soil, and generally walks off with the first prize at the flower show. To get fine flowers one wants a healthy plant, but not a huge one gorged with rich manure. It is odd that folk who will not look at a single Stock cast admiring eyes on a single Aster; yet not so very odd either, for the single is a very bonnie thing. The Kew people call it *Callistephus Sinensis*, but *Aster Sinensis* will do. A splendid late summer flower is the tall red *Lobelia fulgens*, so totally different a plant from the little blue edging *Lobelia*. There are several varieties, and some of them are almost better than the old *fulgens*; they give different colours, any way. The earlier varieties of *Gladioli* are opening their beautiful blooms. The flower gardener is often caught between two minds over them; they look so well in the bed, and yet so well in the house! [There is no reason why some should not be cut, for if they are taken off just as the bottom flowers begin to open they will expand by turns all the way up, so that you have a lovely vase for two or three weeks. What is more, other spikes will follow, so that you will get your bed after all.]

How good the florists are to us! They have earned our gratitude in many ways, but never more than in giving us new varieties of the Japanese *Anemone*. Some of the newcomers will oust the old ones from modern gardens, but it will want a physical as well as mental effort, for the plants root very strongly, and spread afar.

● *Carnations*.—The cottager does not, as a rule, score over the amateur with *Carnations*, because he will not renew them as often as he should. We layered ours into mounds of earth, by slicing along the stems of

the side shoots and pegging them down. Old Carnations may give a lot of flowers, but they are not very inspiring, and when the plants get leggy they look rather ugly. By summer layering one can increase the stock of those varieties which please the most, and thrive the best. The latter point is important. All varieties do not grow equally well in any particular garden. Some grow like spring chickens, others are weedy.

Annual Phloxes.—People say that it is the improvement in dwarf annual Phloxes more than anything else which has caused Verbenas to drop into the background. That may be so, but it was probably based on the misapprehension that the Verbenas had to be kept growing all the winter, and propagated by cuttings in spring. Is not that wrong? Why not raise them from seed like Snapdragons in February? It is cheap, easy, and effectual. Our seedling Verbenas were in bloom with the Phloxes, and although we liked the latter we liked the Verbenas better.

The Double Zinnia.—The finest lot of double Zinnias the author ever saw were in a cottage garden in Kent. They really were magnificent as a break of colour, if, perhaps, a little harsh. The double Zinnia is a flower to admire rather than to love. You can grow it—as we grew ours—like an Aster or a Ten-Week Stock. 🌸

Some Annuals.—The cottager does not shine with annuals as a rule, and the reason is that he does not give them enough room. His Sweet Peas are often good, also his Mignonette, but there it ends. We have already talked of the difficulty of thin seeding. Over sowing is not fatal if the after thinning is thorough. We had a great success with Larkspurs, and want to

know why people are forgetting this good old plant. Rose Mallows were also excellent. Perhaps, however, the annual we found the most valuable was the Godetia in its many varieties. Really, these are almost equal to any florists' flower. The seedsmen have given us some very beautiful forms, which not only possess brilliant colours but are very lasting. A good annual! A great annual! Hadn't we better have a Godetia Society, and make more of it? We were so pleased with the annuals that we willingly allowed Wilkins to extract consent for seed to be purchased and sown for spring. Nemophilas and Silenes were specially bargained for.

Perfume.—The Sweet Peas are still going strongly, for we clip them over at frequent intervals, and so stop podding. Mignonette is in bloom, too, and so are the Sweet Sultans. But the little night-scented Stock beside the porch is sweetest at eventide.

In the Borders.—Seedling Hollyhocks are not so bad, in these disease-ridden days. You may specialise the plants if you are that way inclined, but an expenditure on special varieties may or may not turn out well. Seedlings are often more than respectable, whether the majority come single or double. One can buy plants cheaply in the spring. A clump looks very well, too, towards the back of the border, with the tall flower columns bending over dwarfer things. The Bergamot pleases us greatly with its aromatic odour. The Everlasting Pea makes a very nice object, we find, on a large stump, over which it rambles and flowers in profusion. The white won the heart of Eunice without fully compensating her for the fact that it was not an

“everlasting” flower. People are still misled by this erring term. Presumably the person who named the plant wanted to distinguish it, as a perennial, from the annual Sweet Pea, but he chose a very silly way of doing it. We have a fine variety of the red called splendens. In a cool spot several Evening Primroses gave us pleasure, notably the fine dwarf yellow form of fruticosa called Youngii, and it does not hide its face until evening either.

The Kitchen Garden.—Dry weather tried our Peas, in spite of the mulching, but one or two varieties stood up nobly, and steadily filled up their pods at a period when a chat with the village greengrocer revealed the fact that “there wasn’t a Pea to be had for a thousand mile round.” We sympathised with him in having had to travel so far in the hot, trying weather, and showed him a green and productive row of Autocrat.

Scarlet Runners gave us splendid pickings, and we cleared off the dwarfs, which were getting old and stringy. We earthed up our most forward Celery in order to blanch the stems, taking care to do it with moist soil. Eunice looked puzzled when Wilkins informed her that earthing with dry soil made Celery bolt, not aware of the fact that this is gardenese for running to seed. We earthed up our Leeks, too, but the Lettuces we blanched by tying. [Lettuces are even more addicted to “bolting” than Celery. Just when you think that you have grown a most marvellous crop, and are basing your calculations on having a constant supply for the rest of the year, you see a green tip appear at the top of the plant. Another plant goes the same, another, and another. In a few days three parts of your beautiful Lettuces have put on a top storey, and the crop is spoiled. This vexatious

happening is the most common in dry spells, but it is not limited to dry, hot soils. It is more common among the Cos (upright) than the Cabbage varieties. Growers should not aim at a long supply from one batch, but make small successional sowings, so as to have young plants always coming on. The same with Radishes, of which the oval shaped variety called French Breakfast is so delicious when young, but so hopeless when old and tough.] We sowed Endive, Bath Lettuce, and Onions for spring, and likewise a few rows of Spinach. [The last is another bad "bolter." Choose the variety Victoria, which does not run to seed anything like the round and the prickly.] The Tomatoes had set a good crop of fruit, which was swelling fast, and some of the most forward fruits were even colouring. We clipped in a few of the larger leaves, where they shaded the fruit, and removed those at the bottom of the stem altogether.

The Fruit Garden.—The cordons had grown to our entire satisfaction, and we summer pruned them by cutting all the side shoots back to six leaves.

SEPTEMBER

September may be one of the most delightful months in the garden, or one of the dullest. Of course, a good deal depends on the weather, but not all. An "Indian" summer loses half its pleasure if provision has not been made for having abundance of late flowering plants. Tea and Hybrid Tea Roses should be abundant, and Gladioli should be still strong.

Dahlias.—September is the Dahlia month. If Dahlia enthusiasts do not get their fill now their chance is gone,

and this is said without forgetting the fact that Dahlias are often very valuable in October. We gave our plants a few soakings of liquid manure to help them in the hard work that we expected them to do during the next few weeks.

Chrysanthemums.—As some of the summer flowers were getting a little dingy, we took them from the beds and planted Chrysanthemums from a reserve bed in their places. [This is a direction in which Chrysanthemums have a pull over Dahlias. You can shift the former, like Asters, when they are actually in bud, so long as you chop well round them with a spade, and see that the soil is moist. If the mould is dry, and falls away from the roots, the Chrysanthemums may die. Be not afraid to cut the flowers for fear of spoiling the beds. Get what flowers you want for the house, and let the beds look after themselves.]

The Borders.—We had so arranged our Michaelmas Daisies in the borders that when early blooming plants were cut down (and many may be cut right to the ground as soon as the flowering is over, with advantage to their future), the border still seemed well furnished with bloom. They were in groups here and there, three plants of each variety in most cases. No border can be bare in late summer and autumn if a carefully chosen selection of Michaelmas Daisies is grown, but beauty of flower is not everything. See that you get early, midseason, and late bloomers, in order to ensure a display for several weeks.

The Conservatory.—It had to come, and it came, together with an extra range of frames. [Conservatories and frames go together. You get a conservatory, and

try to grow every imaginable plant in it. Then you find that it was not meant to *grow* plants at all, but to *conserve* them. A conservatory is a show house. Not one out of fifty is a really good growing house. Frames are feeders for the conservatory. And the frames should be heated if they are to feed the conservatory in winter and spring as well as in summer. If they are not you require a greenhouse as well.] With the new glass to furnish we had to turn our attention to a fresh class of plant. We potted Freesias—surely the sweetest bulb that blows, and as easy to grow as a Daffodil. Likewise we potted early White Roman Hyacinths, Gladiolus The Bride, and Paper White Narcissi. We got bulbs of the Tenby and Henry Irving Daffodils, and put them close together in boxes, from which they were to be transplanted to pots when advancing into bloom. We bought and potted Arum Lilies. We sowed seed of the Butterfly Flower (*Schizanthus*) for spring. We got, too, some Salvias, the scarlet Heeri and the brilliant splendens, for winter bloom. Some small, neat, imported plants of Azaleas, well set with flower buds, cost us comparatively little. Another beautiful plant of which we got young specimens for potting was Begonia Gloire de Lorraine, the most charming of all winter flowering plants.

The Vegetable Garden.—Many crops were maturing. Peas in the passing were pulled up, disengaged from their sticks (subsequently chopped up for fuel), and conveyed to the rubbish heap for burning. We sowed Turnip and Spinach on the ground thus cleared. [Turnips often give endless trouble in summer, but grow as gaily as you please in the cooler weather of autumn.]

Beetroot and Carrots were ready for lifting, and after removal of the tops were piled in sand. The last of the Onions were ripened off. All the earlier Potatoes were lifted, allowed to dry for a few hours, and then taken under cover, except those for seed, which were left to green. Thus was gathered in the harvest of the garden, but with an eye on the future we planted out Lettuces, Endive, and Spring Onions.

The Fruit Garden.—A gentle raising of the fruit, so as to bring a little pressure to bear on the stalk, showed that some of the Apples and Pears were ready to gather, and such as parted from the tree we took, in anticipation of early frosts. The young Strawberry plants which we had got from the July runners were sturdy little customers, so we planted them out in a piece of rich ground, mouths watering at the thought of the wonderful crops our second year was going to bring.

OCTOBER.

A faint shade of depression is liable to steal on us at the thought of October. Many give up gardening for the year when they see the leaves begin to fall, but if we had done so we should have lost much pleasure. Flowers were still abundant, and how can one think of closing down for the year while the garden remains gay? There are gaps in the beds, to be sure, and the borders have sensibly sunk, but we are not at the end of things yet by any means. The Dahlias are going strongly, the Chrysanthemums are in their prime, and the Michaelmas Daisies are a glory. If frosts keep away, as they sometimes do the whole month through, flowers are still abundant on Sweet Peas.

Red Hot Pokers (Tritomas) are among the noblest plants of the autumnal garden. A bold group of aloides or one of its varieties gives a fine effect.

The *Pampas Grass* also looks well in October, lighting up the occasional murky days in a very cheerful manner.

One of the best autumnal Roses is *Grüss an Teplitz*, which keeps on flowering until hard frost. This makes a very beautiful bed, owing to its vigorous growth and free blooming. It is good for cutting, as the highly perfumed flowers are borne in large clusters. We liked *Alister Stella Gray* as an autumn Rose too, but it is not so sweet as the German variety.

Tuberous Begonias.—It was not Wilkins alone who found joy in the splendid bed of these which we had. It actually improved in October, the moisture and cool nights suiting the plants. The flowers made a wonderful spread of colour, enlivening the dull days as with sunshine. Towards the end of the month the bed thinned a little, as the foliage ripened and the flower stems weakened. Wilkins hovered round the bed in an ecstasy of delight. It was as good as ever they had had at The Highlands, and how the old squire would love to have it. Wilkins never passed without stooping to scrutinise a flower, which he would raise with the loving and tender gentleness of a mother, and gaze on with a beaming yet wistful face.

Boltonia asteroides rivals the Michaelmas Daisies, and might easily be mistaken for one if it were not looked at closely. The long sprays of bloom are very graceful, and they last.

Winter Storage.—It was not till the very last day of the month that a frost sharp enough to blacken the

Dahlias came. From that time we busied ourselves in preparing for winter storage. The Dahlias were cut down, lifted, and stored in an outhouse. The Gladioli were lifted too, sorted, cleaned, and stored. Lastly the Begonias were pronounced to be over, and, though not without a protest which almost amounted to rebellion, the bed was cleared.

Rose Cuttings.—Eunice had fallen in with an old clergyman who had a passion for Roses on their own roots (he shared this with a great reverence for ritual, but that did not concern her). Eunice was constantly making wonderful discoveries about plants from the various people she met and talked gardening with, and everything fresh that she heard she brought home eagerly, as something calculated to revolutionise the garden. Wilkins and she put in a batch of Rose cuttings together, while the author looked on with indulgent toleration. [Some of them made very good plants eventually, but he is not prepared to admit that we can do away entirely with plants worked on stocks.]

Tulips after Violas.—We took young shoots from the Violas, inserted them, and threw away the old plants, which were now of little value. In their place we planted our May Tulips, with tufts of Arabis and Aubrietia among them to relieve the bareness of the soil.

Daffodils after Asters.—The Asters, Stocks, and other annuals being over, the beds were filled with Narcissi. One can buy such useful things as Poeticus, Barri conspicuus, Empress, and Horsefieldi by the thousand if necessary without any great drain on one's purse.

Frames of Violets.—Regardless of the fact that the frames were nominally restricted to the duty of feeding

the conservatory, Eunice insisted on two being put on a bed of manure for Violets. When the author expostulated, reminding her of the duty of the frames, she said : "Bother ! Buy a lot more !" Frames, then, are to be picked up at any corner for ninepence a dozen ! He had not been aware of it previously. She chose Marie Louise, Comte de Brazza, La France, and Princess of Wales for her varieties.

The Conservatory.—Dutch bulbs are available now, so we put in Hyacinths and Tulips, and early Liliums. Likewise we get Lilies of the Valley, Spiraea Japonica, Dielytra spectabilis, Deutzia gracilis, and other roots. We pot Ixias, and we pot Sparaxis. All these things are cheap, and we know that they will do us good service in winter and spring. We pot, too, some big clumps of Christmas Roses, to give us white bloom in the dull days. More Arum Lilies were potted up from the open ground, and first reduced Eunice to the depths of despair by pretending to die, and then started growing with great determination, which is the way of Arum Lilies.

Zonals.—Eunice had succeeded in keeping Zonal Geraniums out of the garden, but she made no effort to keep them out of the conservatory after she had seen a houseful in the garden of an acquaintance. [You may get away from the Zonal as a summer flower, but you cannot very well escape it as a winter one. It is too convincing. After all, there is a natural explanation. Those fiery, aggressive colours, so flauntingly assertive on brilliant summer days, give us the very warmth and cheerfulness we want in the dull months of winter. One may buy young plants, coming on for flowering, with no dread of bankruptcy proceedings, if the newest

sorts are not chosen. Afterwards the best of them may be increased by cuttings.]

Bouvardias are very cheerful, too; and in the main a little softer in tone than the *Zonals*.

The Kitchen Garden.—The Ancient had left us in the hot weather, having, he explained to Wilkins, “got a better *jäab*.” (This “*jäab*” consisted of scaring birds off a field of Peas on a neighbouring farm. The Ancient performed it by the aid of a pipe, which he smoked somnolently on a gate, and a gun, which he let off every time he woke up, whether there were birds about or not.) He now returned and solicited re-engagement, on the ground that he was now eighty-dree, and was prepared to show “air a one” how to dig. He was therefore given the task of digging and manuring for the next season.

The Fruit Garden.—We finished gathering. The crop had not been exactly gigantic, but it had encouraged us, and after all one must not fruit young trees too heavily the first year.

NOVEMBER.

It is idle to pretend that one enjoys a garden fully in November. The trees are fast becoming bare, lawn and paths are littered with falling leaves, the borders have sunk down very low, the beds are flowerless, save for a few *Chrysanthemums* and *Roses*. Moreover, there may be rain and fog to render outdoor work unpleasant. When, however, one takes the proper view of November, as the great planting month of the year, wherein is laid the foundation of all that is to be good and great in the garden next season, new interest springs into life,

and depression passes swiftly. Now has come the time for changes—extension of borders, alterations in beds, making of new lawns. We knew this, and we knew that we ought to begin quickly, lest bad weather should cause our operations to be suspended for a great many weeks later on. One must always seize the opportunity in gardening—make hay while the sun shines. A busy November gives one ease of mind for all the rest of the winter. There is no rush of spring work to worry one, and whatever is in hand can be done thoroughly.

A Brier Hedge.—We planted more Roses, and made a hedge of Penzance Briers, as much for the perfume of the leaves as the beauty of the flowers. After a shower the fragrance of Brier foliage is deliciously piquant. We did not quite calculate on the hedge reaching to 6 feet high (which it did in its second season), though.

Spring Flowers.—The nursery beds of seedling Wall-flowers, Forget-me-nots, Sweet Williams, Canterbury Bells, Arabises, and Aubrietias were drawn upon, and the plants put into beds and borders.

Hardy bulbs of all kinds were planted, from dwarf Aconite to tall Galtonia. Hyacinths, Tulips, Daffodils, Snowdrops, Lilliums, Crocuses—all were offered to us in a shower of lists and catalogues at prices which encouraged liberal planting.

Shrubs, too, were temptingly cheap. You can buy the same kind of shrub at prices showing a variation of two or three hundred per cent. ; indeed, the nurseryman's traveller who calls may go farther, and after offering you Austrian Pines at thirty shillings per hundred, suddenly comes down on you with a staggering offer of "specimens" at a guinea a tree ! We bought our shrubs

small, and watched them grow. Very young "stuff" (in gardenese all shrubs are "stuff") may look a little meagre just at first, but it transplants well, so that the losses are few, and what ensue are hardly felt. We concentrated on a few special things—*Berberis Darwinii*, *Forsythia suspensa*, *Cytisus Andréanus*, *Mezereon*, *Brooms*, *Kalmias*, *Magnolias*, *Olearia*, *Rhododendrons*, *Veronicas*, and *Viburnum Tinus*, with a few others like silver variegated *Maple*, *Amelanchiers*, *Allspice*, ornamental *Plums*, *Cherries*, *Apples*, and *Thorns*, *Dogwood*, *Deutzias*, *Weigela Eva Rathké*, *Snowdrop Tree* (*Halesia*), *Hydrangea paniculata*, *Scotch Laburnum*, *Honeysuckles*, *Mock Orange*, *Flowering Currants*, *Rubus*, *Spiraeas*, and *Lilacs*.

The Conservatory.—Climbers for the conservatory were now preying on the mind of Eunice, and after much poring and brooding the following list was evolved: *Roses Maréchal Niel*, *William Allen Richardson*, *Climbing Niphotos*, and *Homère*, three sorts of *Passiflora*, *Plumbago Capensis*, *Lapageria rosea* and *alba*, *Stephanotis*, *Solanum Jasminoides*, *Cestrum elegans*, *Tacsonia Van Volxemi*, and *Tibouchina* (seen one day at Kew). For a house fifteen feet by ten, this was not so bad. Eunice would also have hanging baskets of *Asparagus Sprengeri*, *Lachenalias*, and *Clianthus Dampieri* (seen at Kew; a friend, by the way, has a weirdly beautiful plant of *C. puniceus magnificus* on the south wall of his house, and it blooms magnificently). A temporary concession of one *Rose*, one *Passion Flower*, and a basket of *Asparagus* pacified her for the time. [It is so easy to overdo roof and pillar plants. One sees houses tangled with them, most of the plants unhealthy.] But she

yielded only when provision was made for the planting out of a Camellia, and for tubs of Myrtle, Orange, and Clivia.

The Kitchen Garden.—Ground preparation went on. We made a sowing of Broad Beans and Peas, hoping to gain a little with our early crops next year. The Seakale which had been planted as thin “whips” in spring was now bare of leaves, and the biggest of the roots were lifted for forcing in a frame, the rest being left for outdoor forcing with ashes later on. Rhubarb and Asparagus were not of forcing strength yet. We had a fancy to try Mushrooms, and made up a foot deep bed of manure in a frame, which we spawned, soiled, and covered with litter.

The Fruit Garden.—It was planting time for fruit too, and with an example of success in our mind’s eye of bush Apples on the Paradise stock we reclaimed another piece of land (the amazing Ancient flinging out tons of rubbish and breaking up rough, heavy ground with the vigour and relish of youth), and planted a select dozen of varieties, warranted to give us fruit from August to June, as follows : Duchess of Oldenburg, Lord Suffield, Stirling Castle, New Hawthornden, Potts’s Seedling, Peasgood’s Nonesuch, Cox’s Pomona, Manks’ Codlin, Ecklinville Seedling, Golden Noble, Lane’s Prince Albert, and Newton Wonder. We pruned the cordons when the leaves were down, spurring the summer shoots close back, then gathered up leaves and prunings, dug, manured, and left all neat for winter. Safe, too, as we thought ; but it is the unexpected which happens, for in a hard spell during winter, with thick snow upon the ground, rabbits found their way in through a gate

carelessly left open, and, pressed by hunger, barked some of the trees severely. We plastered the wounded stems over with cow manure, and in most cases new bark grew, but one or two trees died.

DECEMBER.

The Garden is asleep at last. Keen frosts at the end of November blackened the last of the flowers. We are hoping for a few Christmas Roses in a nook we know of, but they depend on the weather. December here ! Why, it seems only a few weeks since we began the Garden Year, and now we are at the end of it. Not at the end of *a* year, in the gardening sense, but at the end of *the* year. As a matter of fact, we are already well on with our work for another season. That is how gardening leads you on. Season merges into season. Years overlap each other. Calendrical divisions are obliterated, and life passes under other rules of chronology. It is not March or April, but Daffodil time ; not June, but Rose time ; and so on.

December is a kind of cleaning-up month. All the leaves are down, so that grass and borders can be swept for the last time. We give a final mowing and rolling to the lawn, and so leave it neat. We convey all leaves to an obscure corner, there to rot down for mould. We wheel rubbish to the yard, and soon the odour of the garden fire spreads in the keen air. All refuse from the kitchen garden goes to the fire and is disposed of. The ash we keep for our composts. We shorten the long shoots of overgrown Roses in order to prevent winter wind sway (mark, this is not pruning ; it is shortening). When the ground is hard with frost we wheel manure.

In open spells we push on with our alterations, our plantings, our trenchings. By Christmas, with the weather's good favour, all rough work shall be completed, and we can enjoy the festive season with tranquil minds.

Besides, fresh enterprises are looming up. The Smith-Wilkinsons, Eunice informs the author in firm tones one day, have a vinery. Apparently that is the end of it. She merely gives the information, as she might have told him that the Jones-Robinsons have an air-car. But the author knows Eunice, and groans as he thinks of his depleted banking account. Three days pass, and then Eunice asks the author how he likes the Smith-Wilkinsons, and if he knows that they have a vinery. The author likes the Smith-Wilkinsons very well indeed, and is proceeding to reflect upon the matter of the vinery, when he suddenly remembers an urgent appointment, and disappears. But he already knows that the day is lost. He makes a last effort at the third time of asking. He bursts into a short, hard laugh, and asks Eunice if she would not like a range of Peach houses as well. No one is quicker to perceive irony than Eunice at times, no one is more obtuse at others. She delightedly cries that the author is the dearest old thing alive, and accepts the Peach houses too!

Well, well, it is nice to make people happy, even if you have to save the subscription to one of your favourite clubs (which you visit twice a year), and smoke cheap cigars. The news about the fruit is sweet to Wilkins too. He immerses himself in specifications for houses, estimates are got, and so the die is cast. We are to have the choicest varieties—Wilkins will see to that—and already we picture on the table golden and purple

clusters of luscious Grapes, and great, ruddy, melting Peaches and Nectarines. Strawberries will be forced, too, so that we may get them earlier.

A trouble comes to Wilkins one day at mid-December : the old squire is dead. Wilkins tells the author of the many, many years he served his former master, and never a sharp word or an angry look, but always gentleness, kindness, and perfect courtesy. Four days after Wilkins comes again, in his Sunday black, fresh from the funeral. His face has a singular look, half scared, half delighted. His hands tremble. "I was told to stop, sir, and when they all came out after the reading of the will, the butler rushed into the servants' hall, and said the squire had left me five hundred pounds. It's a fact, sir. I saw the lawyer-gentleman when he was driving off—five hundred pounds. I'm almost afraid to tell Eliza ; she's been that down on the squire ever since I had notice, and now she'll feel such a fool."

So the author goes down to the cottage with Wilkins, and himself breaks the news, with Wilkins awkwardly fingering his stiff collar, and looking very hard away from his sharp-featured, bright-eyed little wife. Eliza's face flushes, she mutters something, then softens to tears. They are close on sixty, and they hadn't a halfpenny in the world beyond the week's earnings. Silence follows. Wilkins pretends to be at ease, and even starts to whistle, but is stopped instantly by a look from Eliza, and is much abashed. The author saves the situation by begging for a cup of tea. Eliza rattles cups, Wilkins rams wood into the fire as though stoking a battleship, and soon a very happy party sits down.

It is Christmas Eve, and we stand in the conservatory gathering flowers for the morrow. There are a few Lilies of the Valley on a shelf, Van Thol Tulips, Roman Hyacinths in abundance, Christmas Roses, Winter Cherries, Zonal Geraniums, Azaleas, Freesias, a pot or two of white Primulas, and Chrysanthemums. The pile of Holly on the floor is supposed to have come from our own trees, but we have a shrewd suspicion that Wilkins has gone farther afield for it—even, perhaps, to the old gardens where he reigned so long, and the thought of which is now tinged with no more bitterness for him.

The long years that we lived in London seem very far away, as we stand here with the soft, warm light stealing in from the cosy room. How foolish seem the doubts that assailed us when we first talked of going “farther out”! The great town had got its shackles on us, and they were not easily broken. It is almost with a shudder that we now think of the grim streets, the fetid air, the clamour, the circumscribed lives. It is a change from slavery to freedom; for the first time our lives are our own.

Our own, and not our own. In former days a jobbing gardener came, who jobbed, but not gardened, a day or two a week, and lived none knew where. We were as much out of his life, and he out of ours, as beings in different planets. But Wilkins could not be kept out, even if we wanted to exclude him. Wilkins the egotistical, the garrulous, the devoted, the faithful, flows in on us, and with Wilkins flows the little, keen-visaged, sharp-eyed Eliza. There are others, too, down in the village, whose lives have got linked with ours somehow. This is one of the things that we once spoke

of with dread, but which now help us in our outlook on life and humanity.

Does the author sigh as he jingles a not over-filled pocket? No, because he has "gone into things," and lo! the Rose garden and the herbaceous borders, the frames and the conservatory, have been paid for out of savings on theatres and doctor's bills. Things balance, after all.

And Eunice's hands are full of flowers, her lips of laughter, her heart of love. For her, as for he whose life has sweetened under her influence, the Garden Year is the first of a new life.

A GARDEN REMEMBRANCER.

JANUARY.

Vegetables.—If the ground is dry enough to work, any land hitherto neglected may be dug, or trenched, and manured. Light soil can generally be cultivated in January. Heavy ground cannot if the weather is wet. Seize the opportunity presented by frostbound ground to do any carting that may be necessary, such as the transport of manure. The seed order for the year should be sent off, as if it is left until the time that it is desired to sow there may be delay. Asparagus may be forced if a heated pit is at command, or if there is sufficient manure to make up, and maintain, the heat in a hotbed. The crowns should be at least three years old. Cauliflowers may be sown in a box if there is a warm house, pit, or hotbed. If hardened and planted out of doors in April they will be ready to cut in June. Celery should be covered with litter in case of severe frost. Onions may be sown in boxes, and placed in gentle heat to give large bulbs. Potato sets intended for seed may be stood on end in shallow boxes and fully exposed to the light, but kept safe from frost. Rhubarb may be forced, either by lifting strong crowns and packing them in soil in a pit with a temperature of about 50°, or covering with an empty box, in turn heaped with litter, out of doors. Seakale may also be forced in a similar way.

Fruit.—Fruit trees of various kinds may be planted if the weather will permit of the soil being worked. (*See Vegetables.*) Strawberries may be planted. Early Vines, or those desired to give ripe Grapes as early as June, must be started in a temperature of 50° to 60°. Early Peaches may also be started, and should have 45° to 55° of heat.

Flower Garden.—Soil may be prepared as for vegetables. Trees and shrubs may be planted if the weather is open. Bulbs may still be planted if the weather is dry enough. Roses may be planted. Carnations should have any leaves affected by disease picked off. Snapdragons may be sown in a box in a warm house, pit, or frame for summer blooming. Tuberous Begonias may also be sown for the current season's flowering. The soil must be made very fine, as the seed is small. Verbenas may be sown for summer flowering in the garden. Lobelias (stock plants) may be put on a shelf in a warm house to give shoots for cuttings.

Greenhouse and Conservatory.—Allamandas used as roof plants may be cleansed and pruned. Bougainvilleas may be treated similarly. Chrysanthemums may be propagated by means of cuttings, which root best if covered

with a bellglass to exclude air. Hyacinths and Tulips in pots should be examined if covered with fibre or ashes, in order that the shoots may not push far. Lily of the Valley crowns may be put in damp moss and placed on hot water pipes, or otherwise forced.

FEBRUARY.

Vegetables.—Asparagus may be forced. Broad (not Kidney) Bean may be sown at the first opportunity. Early Carrots may be sown in a frame. Cauliflowers in boxes under glass must have abundance of air, but very little water, in order to avert damping off. Cucumbers wanted for early crops may be sown in small pots, which should be placed in a warm house or on a hotbed. Lettuces may be sown in a frame for early salads. Mustard and Cress may be sown in boxes. Peas may be sown if the soil is fairly dry, but not if it is very wet. If there is a vinery or Peach house seeds may be sown in boxes there. Early Potatoes may be planted if there is a warm, sheltered border, but not in cold, exposed gardens. Shallots may be planted. Spinach and Turnips may be sown between the spaces to be occupied by rows of Peas. Tomatoes may be sown in pots, pans, or boxes, and placed in gentle heat.

Fruit.—Planting may be proceeded with, if not already done. Pruning may also be attended to. In all cases use a sharp tool. Figs may be pruned. Small fruit which formed the previous year will not be of any use. Early Vines must be brought on gently in a temperature of 55° to 65°. The shoots must be disbudded. Melons may be sown in pots placed on a hotbed or on a shelf in a warm house. Early Peaches may be in bloom, and if so the trellis on which the shoots are tied should be sharply tapped to scatter the pollen. Strawberries in pots may be forced on a shelf.

Flower Garden.—Cannas lifted from the ground the previous autumn may be started in gentle heat. Dahlias may also be put into a little heat to start cuttings. Herbaceous borders may be dressed, removing all dead growth. Planting and division may proceed. Roses may be planted. Sweet Peas may be sown in gentle heat. Tuberous Begonias (tubers) may be put into boxes of leaf mould and placed in gentle heat. Walks should be repaired if they require it.

Greenhouse and Conservatory.—Arum Lilies will be coming into bloom, and will be benefited by liquid manure. Azaleas in pots may be put into gentle heat. Caladiums may be started in heat. Zonal Geraniums in bloom may have a little liquid manure twice a week. Gloxinias (tubers) may be started in heat. Lapagerias on the roof may be pruned. Primulas may be sown. Tuberose may be potted and plunged in fibre preparatory to forcing.

MARCH.

Vegetables.—Artichokes (Jerusalem) may be planted. Asparagus (crowns) may be planted, or seeds may be sown. Broad Beans may be sown. Carrots may be sown out of doors. Cauliflowers for late summer may be sown in cold frames. Cucumbers may be sown. Celery may be sown in boxes.

Hotbeds may be made up. Onions may be sown out of doors. Early plants raised under glass may be pricked off. Parsnips may be sown. Peas may be sown. Potatoes may be planted. Rhubarb and Seakale may be forced. Salads, such as Lettuces, Radishes, and Mustard and Cress, may be sown. Tomatoes may be sown, and early seedlings transplanted. Turnips may be sown. Vegetable Marrows may be sown. Winter Greens (Borecole, Broccoli, Brussels Sprouts, and Savoy) may be sown.

Fruit.—Planting and pruning must be completed. Expanded flowers of early fruits, such as Apricots and Peaches, must be protected. Grapes (early) may be thinned, and Vines started for late crops. Melons may be sown. Peaches must be disbudded, and the fruit thinned.

Flower Garden.—Annuals (hardy) may be sown out of doors towards the end of the month, and half-hardy in frames. Bedding plants, such as Zonal Geraniums and Lobelias, may be propagated by cuttings. Carnations may be planted. Creepers must be pruned. Ivy may be pruned. Pansies and Violas should be planted. Roses may be planted, and forward shoots shortened, but not hard. Shrubs may be planted, Sweet Peas may be sown.

Greenhouse and Conservatory.—Begonia Gloire de Lorraine may be dried off, and, when starting afresh, propagated by cuttings. Chrysanthemums must have more room, and abundance of air. Repot as needed, and put in more cuttings. Coleuses may be propagated by cuttings. Ferns may be potted as soon as they start to grow, and divided if required. Gardenias may be propagated by inserting cuttings. Insects must be kept down by fumigating, vaporising, or spraying. Poinsettia cuttings may be put in.

APRIL.

Vegetables.—Sow dwarf Beans, round Beetroot, Carrots, Leeks, Onions, Parsley, Parsnips, Peas, and Turnips. Plant Potatoes. Plant out Cauliflowers from boxes, and sow outdoors for autumn. Prick off Celery. Plant out Cucumbers under glass. Plant out Onions from boxes. Plant Seakale. Sow Winter Greens.

Fruit.—Graft fruit trees. Disbud Vines. Plant out Melons under glass. Cut back freshly planted Raspberries.

Flower Garden.—Sow annuals outdoors. Plant out Snapdragons. Harden bedding plants in frames. Prick out seedling Begonias and start tubers. Plant Calceolarias and Carnations. Start Dahlias and pot cuttings. Plant Gladioli. Renovate, mow, and roll lawns. Prune Roses. Propagate Violets by cuttings and division.

Greenhouse and Conservatory.—Propagate Bouvardias by root or stem cuttings. Repot young Chrysanthemums, and harden in a frame. Sow Cinerarias. Start Fuchsias, and take cuttings. Repot Orchids. Give liquid manure to Pelargoniums. Sow Primulas.

MAY.

Vegetables.—Sow dwarf French Beans and Scarlet Runners. Sow long Beetroot. Sow Carrots. Plant out Celery. Divide Herbs. Thin Onions

and other young crops where crowded. Stake Peas, and sow for late use. Earth early Potatoes. Harden off Tomatoes.

Fruit.—Thin Grapes. Fertilise Melons. Mulch Strawberries. Keep down all kinds of insects and fungi (for recipes see "Cassell's Pictorial Practical Fruit Growing").

Flower Garden.—Sow annuals. Sow Arabises and Aubrietias. Put out bedding plants towards the end of the month. Sow Canterbury Bells and Forget-me-nots. Plant Dahlias towards the end. Plant hardy ferns. Sow Mignonette. Divide and sow Polyanthus and Primroses. Stake Sweet Peas. Sow Sweet Williams and Wallflowers.

Greenhouse and Conservatory.—Divide and plant Arum Lilies. Repot Azaleas. Repot Camellias, and cut back old plants. Pot Chrysanthemums, and remove the May bud. Propagate Coleuses by cuttings. Stop Fuchsias.

JUNE.

Vegetables.—Finish cutting Asparagus. Sow Scarlet Runners. Remove the tops of Broad Beans if black fly appear. Protect various crops from birds, insects, and fungi (for remedies see "Cassell's Pictorial Practical Vegetable Growing"). Plant Celery. Plant outdoor Cucumbers. Sow salads. Stake Peas. Earth Potatoes. Plant out Tomatoes, Vegetable Marrows, and Winter Greens.

Fruit.—Stop Vine laterals and ventilate vineries. Gather Gooseberries. Fertilise Melons. Thin Peaches. Net Strawberries.

Flower Garden.—Repot Auriculas. Put out bedding plants. Plant out Begonias. Plant Cannas. Plant Dahlias. Sow Foxgloves. Gather Roses, Sweet Peas, Violas, and other flowers.

Greenhouse and Conservatory.—Plant out Arum Lilies. Water Cacti. Give Chrysanthemums their final pots, and put outdoors. Pot ferns. Pinch Fuchsias. Keep Pelargoniums dry after flowering. Syringe and ventilate plant houses.

JULY.

Vegetables.—Earth Celery. Train Cucumbers. Plant out Lettuces. Dry off Shallots. Thin various crops where crowded. Disbud and stake Tomatoes.

Fruit.—Thin late Grapes and stop laterals. Guard against birds and insects. Gather small fruits. Propagate Strawberries by layering.

Flower Garden.—Stake Carnations. Water and mulch various plants. Insert pipings of Pinks. Bud Roses. Pick Violas. Thin Wallflowers and other seedlings where crowded.

Greenhouse and Conservatory.—Stand Azaleas outside. Put Cinerarias and Calceolarias in frames. Water Chrysanthemums. Top-dress Lilliums. Syringe and ventilate to maintain a fresh, buoyant atmosphere. Shade houses.

AUGUST.

Vegetables.—Sow Cabbages for Spring. Earth Celery. Sow Endive. Earth Leeks. Tie Lettuces. Harvest Onions. Clear off decaying Beans and Peas. Sow Spinach. Thin the foliage of Tomatoes.

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Fruit.—Syringe and ventilate vineries, but close early in the afternoon to husband heat. Thin out fruited shoots of Peaches. Layer Strawberries. Summer prune fruit trees.

Flower Garden.—Remove worn out annuals. Sow others for spring. Layer Carnations (for method see "Cassell's Pictorial Practical Carnation Growing"). Stake Gladioli. Put in cuttings of Zonal Geraniums. Bud Roses.

Greenhouse and Conservatory.—Water Chrysanthemums. Watch for and "take" buds (for details see "Cassell's Pictorial Chrysanthemum Culture"). Sow Cyclamens. Strike cuttings of Heliotrope. Top-dress Lilliums. Start Pelargoniums.

SEPTEMBER.

Vegetables.—Give liquid manure to Peas and Scarlet Runners. Lift and store Beetroot and Carrots. Plant out Cabbages. Earth and feed Celery. Harvest Onions. Lift early Potatoes. Gather Tomatoes. Sow Turnips.

Fruit.—Gather early Apples and Pears. Cut back old Raspberry canes.

Flower Garden.—Sow annuals for spring. Mulch flower beds. Feed Dahlias. Propagate bedding plants. Mow and roll lawns. Plant Lillium candidum, Irises, and Daffodils.

Greenhouse and Conservatory.—Lift and pot Arum Lilies. Bring in Azaleas. Take Chrysanthemum buds. Pot Freesias, Roman Hyacinths, and early Narcissi. Pot Gladiolus The Bride. Propagate Gloxinias by leaves. Pot Salvias. Pot Schizanthuses.

OCTOBER.

Vegetables.—Lift and store Beetroot and Carrots. Plant out Cabbages. Plant Lettuces. Lift Potatoes. Clear off all decaying crops.

Fruit.—Gather Apples and Pears. Shorten Vine laterals.

Flower Garden.—Lift and store Begonias. Put in Calceolaria and Pentstemon cuttings. Lift, dry, and store Dahlias and Gladioli. Plant Daffodils, Crocuses, Snowdrops, Hyacinths, and Tulips. Plant Paeonies. Make up a hotbed and frame for Violets. Put in Rose cuttings. Plant Primroses, Canterbury Bells, Wallflowers, Arabises, Aubrietias, Forget-me-nots, and Foxgloves.

Greenhouse and Conservatory.—Gradually dry off Caladiums. House Chrysanthemums. Put Calceolarias and Cinerarias in the greenhouse. Gradually dry off Gloxinias. Pot Hyacinths, Tulips, Lilliums, Narcissi, and other bulbs.

NOVEMBER.

Vegetables.—Sow Broad Beans. Protect Celery. Dig and manure vacant ground. Lift Rhubarb and Seakale for forcing.

Fruit.—Prune Vines. Prepare ground for and plant all kinds of outdoor fruit. Prune fruit trees. Tie wall Trees. Plant Vines and Peaches in houses.

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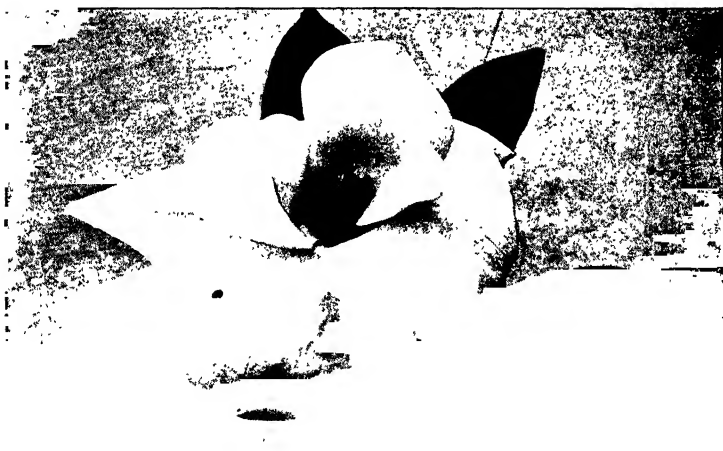
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the conservatory. I have never tried the *Proteas* in the pit of a conservatory, being of opinion that they would not do well; the best soil for them is a light turfy loam, mixed with one-third of fine sand; the pots should be well drained, and care should be taken not to let them droop for want of water, as the young roots are of a fleshy substance, and soon suffer by being too dry, as well as by being too wet, they seldom recover if permitted to droop long; they also should be placed where they will have a free circulation of air.

A LIST OF CONSERVATORY PLANTS.

<i>Acacia</i> <i>ulata</i> .	<i>Calistemon</i> <i>linearis</i> .
——— <i>decipiens</i> .	<i>Cistus</i> <i>roseus</i> .
——— <i>armata</i> .	——— <i>formosus</i> .
——— <i>taxifolia</i> .	<i>Calothamnus</i> <i>quadrifida</i> .
——— <i>falcata</i> .	——— <i>vilosa</i> .
——— <i>angustifolia</i> .	<i>Crataegus</i> <i>glabra</i> .
——— <i>linarifolia</i> .	<i>Cassuarina</i> <i>stricta</i> .
——— <i>verticillata</i> .	——— <i>equisetifolia</i> .
——— <i>elongata</i> .	——— <i>suberosa</i> .
——— <i>floribunda</i> .	<i>Calceolaria</i> <i>integrifolia</i> .
——— <i>latifolia</i> .	<i>Clusia</i> <i>glauca</i> .
——— <i>sophora</i> .	<i>Calistachys</i> <i>lanceolata</i> .
——— <i>pulehella</i> .	<i>Cassia</i> <i>multiglandulosa</i> .
——— <i>lophantha</i> .	<i>Cassine</i> <i>maurocenia</i> .
——— <i>discolor</i> .	<i>Correa</i> <i>alba</i> .
——— <i>pubescens</i> .	——— <i>pulehella</i> .
——— <i>decurrens</i> .	——— <i>virens</i> .
——— <i>longifolia</i> .	<i>Celastrus</i> <i>buxifolius</i> .
——— <i>myrtifolia</i> .	<i>Cyclopia</i> <i>genistoides</i> .
——— <i>ulicina</i> .	<i>Cussonia</i> <i>pinnata</i> .
<i>Aster</i> <i>argophyllus</i> .	<i>Crotalaria</i> <i>elegans</i> .
——— <i>dentatus</i> .	<i>Ceanothus</i> <i>africanus</i> .
<i>Anthyllis</i> <i>hermannia</i> .	<i>Clethra</i> <i>arborea</i> .
——— <i>crinacea</i> .	<i>Ceratonia</i> <i>siliqua</i> .
<i>Arbutus</i> <i>canariensis</i> .	<i>Doryanthus</i> <i>excelsa</i> .
<i>Banksia</i> <i>ericifolia</i> .	<i>Dodonea</i> <i>triquetra</i> .
<i>Bauera</i> <i>rubioides</i> .	<i>Eucalyptus</i> <i>pulverulenta</i> .
——— <i>humilis</i> .	——— <i>piperita</i> .
<i>Beaufortia</i> <i>decussata</i> .	——— <i>oppositifolia</i> .
——— <i>sparsa</i> .	——— <i>obliqua</i> .
<i>Bursaria</i> <i>spinosa</i> .	——— <i>globosa</i> .
<i>Brunia</i> <i>superba</i> .	<i>Eutaxia</i> <i>myrtifolia</i> .
<i>Blandfordia</i> <i>grandiflora</i> .	——— <i>pungens</i> .
——— <i>nobilis</i> .	<i>Enkianthus</i> <i>quinquiflora</i> .
<i>Beckia</i> <i>virgata</i> .	<i>Epacris</i> <i>grandiflora</i> .
<i>Callistemon</i> <i>lanceolata</i> .	——— <i>juniperina</i> .
——— <i>saligna</i> .	——— <i>pulehella</i> .
	<i>Ficus</i> <i>aspera</i> .

Gastrolobium bilobium.

Globalaria longifolia:

Goodia pubescens.

——— *latifolia.*

Grevillea linearis.

——— *sericea.*

——— *punicea.*

Hakea dactyloides.

——— *saligna.*

——— *obcifolia.*

——— *florida.*

——— *pugioniformis.*

——— *suaveolens.*

——— *ceratophylla.*

——— *gibbosa.*

Halleria lucida.

Ilex perado.

——— *canariensis.*

Lebeckia cyttisoides.

Lamarkia dentata.

Lasiopetalum ferugineum.

Leptospermum ambiguum.

——— *flavescens.*

——— *floribundum.*

——— *juniperinum.*

——— *myrtifolium.*

——— *thea.*

Laurus camphora.

Lauophyllus capensis

Lomatia salicifolia.

Lagerstremia indica.

Lenonotus leonurus.

Metrosideros floribunda.

——— *canaliculata.*

Melaleuca incana.

——— *virgata.*

——— *armillaris.*

——— *densa.*

——— *decussata.*

——— *coronata.*

——— *squarrosa.*

——— *stypiloides.*

——— *hypericifolia.*

——— *diosmifolia.*

——— *splendens.*

——— *thymifolia.*

Melia azedarach.

Myrica quercifolia.

Magnolia fuscata.

Magnolia pumila.

Myrcine africana.

——— *retusa.*

Mimulus glutinosus.

Myoporum ellipticum.

Nerium oleander.

——— *splendens.*

Nandina domestica.

Olea apetala.

——— *excelsa.*

——— *fragrans.*

Persoonia lanceolata.

——— *latifolia,*

——— *fusca.*

——— *linearis.*

Podalyria latifolia.

——— *myrtifolia.*

——— *sericea.*

——— *styracifolia.*

Pittosporum coriaceum.

——— *undulatum.*

——— *pumila.*

Pomaderris apetala.

——— *elliptica.*

Passerina filiformis.

Pultenea daphnoides.

——— *stricta.*

Pinknea pubens,

Prostanthera lasianthus.

Podolobium trilobatum.

Psoralea pinnata.

Polygala grandiflora.

——— *speciosa.*

——— *myrtifolia.*

Pogonia glabra.

Rhus trifoliata.

Rubus rosafolius.

Rhododendron arboreum

Reaumarina hypericoides.

Schaerola crassifolia.

Sideroxylon inerme.

Sophora capensis.

Serissa fetida.

Sparmania africana.

Salvia chamedrifolia.

Swainsonia coronillifolia.

——— *albiflora.*

Thomasia solanacea.

——— *quercifolium:*

<i>Telopea speciosissima.</i>	<i>Vestia licyoides.</i>
<i>Tristania laurifolia.</i>	<i>Viminaria denudata.</i>
———— <i>nerifolia.</i>	<i>Westringia rosmarinifolia.</i>
———— <i>conferta.</i>	<i>Yucca superba.</i>
<i>Simpletonia retusa.</i>	<i>Zieria Smithii.</i>
<i>Virgilia capensis.</i>	

CLIMBERS FOR THE CONSERVATORY.

<i>Aristolochia sempervirens.</i>	<i>Kennedia angustifolia.</i>
———— <i>glauca.</i>	———— <i>bimaculata.</i>
<i>Bignonia capreolata.</i>	———— <i>Comptoniana.</i>
<i>Billardiera mutabilis.</i>	———— <i>inconspicua.</i>
———— <i>scandens.</i>	———— <i>monophylla.</i>
<i>Begonia grandis.</i>	———— <i>rubicunda.</i>
<i>Clematis capensis.</i>	———— 2 var. <i>major.</i>
———— <i>florida.</i>	<i>Caprifolium japonica.</i>
———— <i>florida simplex.</i>	———— <i>sempervirens.</i>
<i>Cobea scandens.</i>	———— <i>flavum.</i>
<i>Convolvulus canariensis.</i>	———— <i>nepalense.</i>
———— <i>punifolius.</i>	———— <i>flexuosum.</i>
———— <i>Oxatilis.</i>	<i>Maurandya semperflorens.</i>
<i>Decumaria sarmentosa.</i>	———— <i>antirrhineflora.</i>
<i>Dolichos lignosus.</i>	———— <i>Barclayana.</i>
<i>Eccremocarpus scaber.</i>	<i>Passiflora racemosa cœrules.</i>
———— <i>longiflorus.</i>	———— <i>angustifolia var.</i>
<i>Brachysema latifolium.</i>	———— <i>chinensis.</i>
———— <i>undulatum.</i>	<i>Periploca africana.</i>
<i>Glycine sinensis.</i>	———— <i>lævigata.</i>
<i>Hibbertia volubilis.</i>	<i>Smilax Ripogonum.</i>
———— <i>lanceolata.</i>	<i>Scisandra coccinea.</i>
———— <i>grossularifolia.</i>	<i>Tecoma grandiflora.</i>
<i>Jasminum gracile.</i>	———— <i>capensis.</i>
———— <i>azoricum.</i>	———— <i>australis.</i>
———— <i>grandiflorum.</i>	<i>Usteria personata.</i>
———— <i>heterophyllum.</i>	———— <i>scandens.</i>
———— <i>revolutum.</i>	

All the varieties of the *Camellia japonica* may be kept in pots, and may be forced to introduce occasionally. The *Azalea indica* also in all its varieties.

ARTICLE III.—ON AN INTERESTING MODE OF TRAINING PLANTS,
With a List of Kinds to which it is peculiarly applicable.

BY LOUISA.

THE usual mode of training climbers in the Stove, Greenhouse, or Conservatory, has, in my judgment, many objectionable things in its practice. The plan is to have them run up lofty pillars, walls, trellises, or rafters, by which the flowers are generally removed too far from minute observation, so as to distinctly notice the beautiful form

or colours of the blossoms. It occurred to me in the spring of 1835, that some other method might be devised to answer every purpose of the plants, and bring the blossoms close to view. I therefore had some wire frames constructed at various heights and diameters, some six feet high, others five and four, and of such a diameter as that the bottom of the frame fitted to the size of the pot in which the plant was growing. I had a few made with four upright strong wires, but they did not look at all so neat as those I had with six. The top of the wire frame is made to splay, so that it is rather funnel shaped: The coating wire is commenced at the bottom and is continued, at two inches apart, to the top. I had a few girths of wire quite round the whole in order to bind them firmly and steadily, whilst the coiled wire was to train to.

This plan brings the plants within desirable bounds for training and regulating, which attention, on the old system, is often found difficult to perform, and then neglect ensuing, disorder is the unsightly result. But in my mode of treatment, it is easily and neatly performed, and affords a very pleasing duty to secure the leading shoots to the desired positions. The result is, the collecting into the small compass of a bush, and thus quite near to view, in many instances of hundreds of blossoms. I beg to assure the readers of the *Cabinet*, that those persons who may adopt the same plan will not fail of being highly pleased with it.

The kinds of plants I have used this mode of training to, are the following, but it is properly applicable to all climbers, either exotic or hardy.

<i>Tropæolum tricolorum.</i>	—————azoricum.
—————pentaphyllum.	<i>Passiflora carnulea.</i>
<i>Hibbertia crenata.</i>	—————racemosa.
<i>Kennedia coccinea.</i>	—————floribunda.
—————Comptoniana.	—————laurifolia.
—————monophylla.	<i>Rhodochiton volubile.</i>
—————ovata.	<i>Lophospermum scandens.</i>
—————sericea.	<i>Eccremocarpus scaber.</i>
—————dilatata.	<i>Maurandia Barclayana.</i>
<i>Cobæa scandens.</i>	—————semperflorens.
<i>Dolichos lignosus.</i>	<i>Convolvulus major.</i>
<i>Convolvulus pannifolius.</i>	<i>Ipomœa striata.</i>
—————canariensis.	—————coccinea.
<i>Lonicera japonica.</i>	—————punctata.
—————flexuosa.	<i>New Crimson.</i>
<i>Jasminum grandiflorum.</i>	<i>Nasturtium.</i>
—————revolutum.	

All of the above did remarkably well, and I think it would answer equally as well for many of the finest hothouse climbers.

June 3rd, 1836.

5 *E. CUSPIDATUM*, The pointed. The flower stem rises about a foot and a half, having several flowers, the petals of which are of a yellowish green colour, and the rest of the flower a pure white. It is a ornamental species. It blooms with me in July and August.

6. *E. COCHLEATUM*, The spiral. The flowers are produced upon a stalk about fifteen inches long. They are very curious, being of a brown and purple colour; this kind flowers nearly all the year.

7. *E. DIFFUSUM*, The diffuse flowered. The flower stem does not extend more than a foot long, the flowers are green, but pretty. It blooms in September and October.

8. *E. ELONGATUM*, Long stalked. The flower stem extends near a yard long, producing numerous flowers, of a reddish colour. It blooms from May to September. This species is easy of culture, and of propagation; in turfy peat, rotten wood and potsherds, grown in a strong moist heat, this kind flourishes amazingly.

9. *E. FRAGRANS*, Sweet scented. The flower stem extends about nine inches, producing numerous, highly fragrant flowers, which give a delightful odour in the stove. The petals are of a greenish white colour, and the labellum is streaked with deep rose. It is a very deservedly cultivated species. This kind grows best with me, in equal parts of rotten wood, turfy peat, and potsherds; I also use a little moss for bottom drainage, which is of advantage.

(To be continued.)

ARTICLE VI.—ON A HEDGE FORMED OF FUCHSIAS.

BY LUCY.

DURING the summer of 1835, I visited a considerable number of Nobleinen and Gentlemen's gardens in the midland counties, as Leicestershire, Nottinghamshire, Northamptonshire, &c., and among the most showy and ornamental plants which came under my notice and attracted my attention, was a hedge formed of *Fuchsia virgata*. It was fifty yards long, and six feet high, clothed with a vast profusion of the beautiful pendant blossoms. No adequate conception can be formed of its beauty by those persons who have not seen it.

The very intelligent, and communicative gardener, gave me the following particulars of the mode of management he had so successfully practised with the plants, which in two years had been brought to a state of perfection and beauty.

In the spring of 1833 two old plants of *Fuchsia virgata*, growing in the open border, were taken up, and having many rooted suckers they were divided from the old plants. Each sucker was potted into

a 24 sized pot, in a compost of one half well rotted leaf mould, and the other rich sandy loam. The newly potted plants were then placed in a hotbed frame for a fortnight in order to cause the roots to be excited, after which they were removed into a greenhouse. Each plant was tied up to a straight stick, to which the leading shoot was regularly secured. All lateral shoots were cut back, "when they got about six inches long," so as only to leave one joint upon each. This shortening was repeated through the season, the inducement to which was to cause the leading stem to grow vigorously and at the same time to retain short laterals to push from, when the lead had reached the desired height.

About the middle of June the plants were shifted, with balls entire, into pots a foot in diameter at the top, using the same kind of compost. The plants still kept in the greenhouse. During the whole of summer they were *liberally* supplied with water at the roots, and occasionally, with the other plants in the greenhouse, syringed over the tops.

At the end of the season of 1833, the leading stem of each was near five feet high, and abundantly furnished with short lateral shoots.

The plants were kept in a cool greenhouse throughout winter, and in April 1834, were planted out with balls entire, but gently shook and patted so as to loosen the fibrous roots outside the ball. The ground was previously prepared for their reception, by taking away the poor soil to the depth of half a yard, and filling it up with a well enriched compost. The plants were well watered at the time of planting, and this was frequently repeated during the season.

Each plant had a strong straight stake to which it was secured; during the summer, the plants formed a very handsome hedge, and bloomed profusely. The design of forming the hedge was to conceal an object from view, at the front of a range of plant stoves.

At the end of November the entire hedge was covered with wool-len netting, the mesh of which was half an inch square, this was secured over the same by a temporary railing along the sides. The netting admits a suitable portion of light and air, but is a perfect security to the plants from injury by frost.

In April 1835 the netting was taken away and the lateral shoots were pruned back, so as to leave about six inches of each. This formed the plants into the shape of a close set hedge of thorns. During summer they spread and bloom profusely, they are protected in winter, and pruned again in April."

ting powers of the sun and atmosphere; the other lying deeper, being known to abound with crude unqualified matter very unfavourable to the growth of tender plants, unless exposed in the compost yard for a year or two to the weather, whereby, it will become fit for all strong growing woody kinds, or fruit trees in general.

Loam, being found answerable to the purpose for which it is designed, it should be immediately carted home and heaped in a clean part of the compost yard for a few months, so that the turf, and fibres of the grass, may have sufficient time to decay, and the whole become more qualified for use through the action of the season: when it has lain thus for some time together, it will be found to be in a very good state for working.

This sort of soil is particularly adapted for striking cuttings in general, on account of its firm close texture, and the twofold quality of retaining moisture longer than either peat or sand, and at the same time, its own natural dissolubility, which admits the young fibres of the cuttings to push through it freely, as soon as formed, to that which they more immediately like to grow and flourish in, a stratum of which is generally put in the bottom of the pot.

From its strength it seems more adapted to arborescent plants in general, which have powerful roots, that are seldom able to support themselves in lighter soils, more especially in dry seasons; while from its purity and sweetness, it may be said to give additional flavour to the most delicate fruits.

The word Peat, is generally understood to mean common bog earth; however, that which may literally be termed *bog*, is by no means proper for our purpose, on account of its wet coagulating nature, and tendency thereby to rot the roots of the plants; at least if peat is to be taken from those situations, the very surface only should be chosen, as that is found to contain a greater portion of the fine, drying, opening kind of sand, so necessary to this species of soil.

The places where I would recommend to look for the proper peat, are those dry healthy commons, where it seems to form a medium between bog earth and sand, it is not unfrequently found forming a mere skin, over a bed of pure sand, or gravel. The turf or sod, cut about four or six inches deep, is always the best for use, as it is in general the lightest, and abounds with sand, as already mentioned, which is I think invariably found to be the finest near the surface in such cases. Spots where the wild heath grows luxuriantly should be diligently selected, as producing the best peat for general use; but when it is considered that of the plants mostly cultivated in this kind of soil, some grow in swamps near rivers, others in barren sandy

wastes, and more in all their various intermediate stations, as mountains, low lands, &c. &c. especially heaths from the varied surface of Southern Africa; it will surely be obvious, that a supply of every variety of soil should be always at hand, and that the peat answering for one species will not be so congenial as another brought from a very different situation and soil.

It should be cast into a heap in the compost yard for twelve or fourteen months before used, a practice which ought to be observed with composts in general.

It is to be used only for such plants as are known to grow naturally in peat, or those which are known to thrive best in a very light sandy soil: also to be mixed occasionally with Loam, for such as delight in an intermediate compost.

Most plants grow remarkably free in peat during the summer season, if kept carefully watered, particularly those which come under the denomination of half herbaceous or biennial like plants; yet, even these, are often liable to perish in winter, on account of the extreme lightness of the soil, and the cold necessarily produced by frequent watering.

Shrubby, hard wooded, and fine fibrous rooted plants in general, thrive very well in this and loam, mixed in about equal proportions; but I think it by no means suitable to fruits. It is seldom used by itself except for heaths, Botany Bay plants, and the general productions of Northern America, to all of which it seems particularly adapted.

Sand is rarely used simply, except for striking cuttings of the two first of the above mentioned plants; viz. heaths, and Botany Bays; for which it is peculiarly suitable; their fine hair-like fibres not having strength to vegetate in stronger soils. An inch or two in depth on the surface is quite sufficient, as it is intended merely to strike the cutting in, the lower part of the pot being filled with peat, into which the young fibres will soon penetrate, and draw therefrom the principal part of their nourishment as from their parent soil: it should be kept moderately moist when used in this manner, otherwise, from its natural drying quality, it would soon parch up and destroy whatever cuttings may have been put therein.

The soil of the interior parts of Southern Africa being for the greater part excessively sandy, a considerable portion of it should be used in the composts intended for the productions of that country, both of woody, herbaceous, and bulbous species.

Pit sand should be invariably preferred for this purpose, it being, of a more lively vegetating nature than river or sea sand, and if we

may judge by colour, the whitest that can be procured; as I have always observed it to be the finest, and have from repeated trials proved that the finer the sand, the surer a good crop of cuttings.

It requires no kind of preparatory process, more than shifting, to divest it of those small pebbles, &c., which are usually found amongst it, and to be kept pure and unmixed with extraneous substances, until wanted for use.

By vegetable mould, at least the kind best suited to our purpose, is meant that which accumulates, or in a manner grows, if I may use the expression, in woods, particularly those of a long standing, by the annual fall of leaves, &c., and their consequent decay; the vicissitudes of a few revolving seasons reduces them to a perfect mould, which is afterwards known by the above appellation. It is of a very loose, light nature, and comparatively rich, but far behind that produced by the mixture of animal excrement. Yet it is doubtless of an ameliorating nature, and highly recommendable for such plants as delight in a moderate and well digested manure.

In its simple state it is hardly fit for any thing except annuals, as its extreme lightness, like the peat, renders it unable to support arborescent plants with any degree of credit: however, when mixed with loam, or any other soil of a more firm texture than itself, it is particularly useful for West India plants, geraniums, and annuals in general.

The best manner of procuring it is to have several large pits dug in the most convenient part of the woods, into which may be annually raked all the leaves in the vicinity, together with the general surface of the ground produced by them in preceding years, which will materially accelerate their decomposition; so that in a few months, they become a perfect mould, and fit for use,

Of animal manure, that procured from old hot-beds is, I think, most suitable for composts in this department. It likewise should not be used for plants until rotted to a perfect mould; to promote which, it should be well mixed with a small portion of loam in the compost yard, whereby they will become better incorporated, and more fit for use; it is necessary however, not to add too much loam to it in this process, as it is so much easier to add afterwards than to take away, according as circumstances may require.

This mixed with a proper quantity of loam, is in general the best compost for such plants as have soft fleshy roots, also for soft wooded, half shrubby, and herbaceous kinds of plants, annuals, biennials, &c. &c. but is never used simply by itself, and very rarely, if at all, mixed with peat or sand.

The very great variety in the nature of plants, taken *en masse*, renders it utterly impossible to specify within the limits of this article, the soil proper for each particular species; however I think it may be advanced as a rule not subject to many objections that the whole of each genus are generally fond of the same compost. I shall draw up a table of Genera, of which any of the species are known to require the aid of the greenhouse or stove; shewing that peculiar soil, most suitable to each particular genus; deduced from observations on the extensive collections I have had under my own particular care, combined with those which I have had an opportunity of making on others, as well in the vicinity of London, as around Dublin.

The necessity of this combination is evident from the difficulty of finding the whole of the genera here enumerated, in any single collection in the united kingdom.

ARTICLE II.—A LIST OF PLANTS, SUITABLE FOR PLANTING OUT IN A CONSERVATORY.

BY MR. FRANCIS GOODALL, GARDENER, RHODE HALL, NANTWICH, CHESHIRE.

As your Correspondent, "a Devonian," solicits the favour of a list of Conservatory Plants, I have sent you the following which are suitable for the pit of a large conservatory—also a list of climbers, suitable for the Columns, Pilastres, and Trellis. The whole may be purchased from Mr. Knight, of the Exotic Gardens, Kings Road, Chelsea, London. Indeed, Mr. Knight grows very fine plants for furnishing conservatories.

The *Telopea speciosissima*, on the culture of, which a "Devonian" requests the favour of a few hints, is one of the most beautiful greenhouse plants; it will do very well in the pit of a conservatory, if well managed; the most suitable soil is one-third light loam, one-third peat, and one-third fine sand. If placed in a conservatory, choose a situation where the plant may get plenty of light and air, and be very sparing of the water during the autumn and winter, although the plant should never be allowed to flag. The *Azalea indica*, of which there are several fine varieties, thrive best in sandy peat—I have never tried it in the pit of a conservatory; the pots should be well drained through broken potsherds, and treated during the summer months, the same way as other greenhouse plants.

At the usual time for houseing, place them in the greenhouse, afterwards they may be taken a few at a time into the forcing house, when they will soon show their beautiful blossoms, and make a most splendid show when placed in the vases in

the conservatory. I have never tried the *Proteas* in the pit of a conservatory, being of opinion that they would not do well; the best soil for them is a light turfy loam, mixed with one-third of fine sand; the pots should be well drained, and care should be taken not to let them droop for want of water, as the young roots are of a fleshy substance, and soon suffer by being too dry, as well as by being too wet, they seldom recover if permitted to droop long; they also should be placed where they will have a free circulation of air.

A LIST OF CONSERVATORY PLANTS.

Acacia alata.	Calistemon linearis.
— decipiens.	Cistus roseus.
— armata.	— formosus.
— taxifolia.	Calothamnus quadrifida.
— falcata.	— villosa.
— angustifolia.	Cratægus glabra.
— linearifolia.	Cassuarina stricta.
— verticillulata.	— equisitifolia.
— elongata.	— suberosa.
— floribunda.	Calceolaria integrifolia.
— latifolia.	Clusia glauca.
— sophora.	Calistachys lanceolata.
— pulchella.	Cassia multiglandulosa.
— lophantha.	Cassia mauriceana.
— discolor.	Correa alba.
— pubescens.	— pulchella.
— decurrens.	— virens.
— longifolia.	Celastrus buxifolius.
— myrtifolia.	Cyclopia genistoides.
— ulicina.	Cussonia pinnata.
Aster argophyllus.	Crotolaria elegans.
— dentatus.	Ceanothus africanus.
Anthyllis hermiantha.	Clethra arborea.
— eriacea.	Ceratonis siliqua.
Arbutus canariensis.	Doryanthus excelsa.
Banksia ericifolia.	Dodonea triquetra.
Bauera rubioides.	Eucalyptus pulverulenta.
— humilis.	— piperita.
Beaufortia decussata.	— oppositifolia.
— sparsa.	— obliqua.
Bursaria spinosa.	— globosa.
Brucea superba.	Eutaxia myrtifolia.
Blandfordia grandiflora.	— pungens.
— nobilis.	Enkianthus quinqueflora.
Beckia virgata.	Epacris grandiflora.
Callistemon lanceolata.	— juniperina.
— speciosa.	— pulchella.
— saligna.	Ficus aspera.

- Gastrolobium bilobium.*
Globalaria longifolia:
Goodia pubescens.
 latifolia.
Grevillea linearis.
 sericea.
 punicea.
Hakea dactyloides.
 saligna.
 obcifolia.
 florida.
 pugioniformis.
 suaveolens.
 ceratophylla.
 gibbosa.
Halleria lucida.
Ilex perado.
 canariensis.
Lebeckia cyttisoides.
Lamarkia dentata.
Lasiopetalum ferrugineum.
Leptospermum ambiguum.
 flavescens.
 floribundum.
 juniperinum.
 myrtifolium.
 thea.
Laurus camphora.
Laucophyllus capensis.
Lomatia salicifolia.
Lagerstremia indica.
Lenonotus leonurus.
Metrosideros floribunda.
 canaliculata.
Melaleuca incana.
 virgata.
 armillaris.
 densa.
 decussata.
 coronata.
 squarrosa.
 styppiloides.
 hypericifolia.
 diosmifolia.
 splendens.
 thymifolia.
Melia azedarach.
Myrica quercifolia.
Magnolia fuscata.
- Magnolia pumila.*
Myrcine africana.
 retusa.
Mimulus glutinosus.
Myoporum ellipticum.
Nerium oleander.
 splendens.
Nandina domestica.
Olea apetala.
 excelsa.
 fragrans.
Persoonia lanceolata.
 latifolia,
 fusca.
 linearis.
Podalyria latifolia.
 myrtifolia.
 sericea.
 styracifolia.
Pittosporum coriaceum.
 undulatum.
 pumila.
Pomaderris apetala.
 elliptica.
Passerina filiformis.
Pultenea daphnoides.
 stricta.
Pinkuea pubens,
Prostanthera lasianthus.
Podolobium trilobatum.
Psoralea pinnata.
Polygala grandiflora.
 speciosa.
 myrtifolia.
Pogonia glabra.
Rhus trifoliata.
Rubus rosafolius.
Rhododendron arboreum
Reaumaria hypericoides.
Schaerola crassifolia.
Sideroxylon inerme.
Sophora capensis.
Serissa fetida.
Sparmania africana.
Salvia chamedrifolia.
Swainsonia coronillifolia.
 albiflora.
Thomasia solanacea.
 quercifolium:

ting powers of the sun and atmosphere; the other lying deeper, being known to abound with crude unqualified matter very unfavourable to the growth of tender plants, unless exposed in the compost yard for a year or two to the weather, whereby, it will become fit for all strong growing woody kinds, or fruit trees in general.

Loam, being found answerable to the purpose for which it is designed, it should be immediately carted home and heaped in a clean part of the compost yard for a few months, so that the turf, and fibres of the grass, may have sufficient time to decay, and the whole become more qualified for use through the action of the season: when it has lain thus for some time together, it will be found to be in a very good state for working.

This sort of soil is particularly adapted for striking cuttings in general, on account of its firm close texture, and the twofold quality of retaining moisture longer than either peat or sand, and at the same time, its own natural dissolubility, which admits the young fibres of the cuttings to push through it freely, as soon as formed, to that which they more immediately like to grow and flourish in, a stratum of which is generally put in the bottom of the pot.

From its strength it seems more adapted to arborescent plants in general, which have powerful roots, that are seldom able to support themselves in lighter soils, more especially in dry seasons; while from its purity and sweetness, it may be said to give additional flavour to the most delicate fruits.

The word Peat, is generally understood to mean common bog earth; however, that which may literally be termed *bog*, is by no means proper for our purpose, on account of its wet coagulating nature, and tendency thereby to rot the roots of the plants; at least if peat is to be taken from those situations, the very surface only should be chosen, as that is found to contain a greater portion of the fine, drying, opening kind of sand, so necessary to this species of soil.

The places where I would recommend to look for the proper peat, are those dry healthy commons, where it seems to form a medium between bog earth and sand, it is not unfrequently found forming a mere skin, over a bed of pure sand, or gravel. The turf or sod, cut about four or six inches deep, is always the best for use, as it is in general the lightest, and abounds with sand, as already mentioned, which is I think invariably found to be the finest near the surface in such cases. Spots where the wild heath grows luxuriantly should be diligently selected, as producing the best peat for general use; but when it is considered that of the plants mostly cultivated in this kind of soil, some grow in swamps near rivers, others in barren sandy

wastes, and more in all their various intermediate stations, as mountains, low lands, &c. &c. especially heaths from the varied surface of Southern Africa; it will surely be obvious, that a supply of every variety of soil should be always at hand, and that the peat answering for one species will not be so congenial as another brought from a very different situation and soil.

It should be cast into a heap in the compost yard for twelve or fourteen months before used, a practice which ought to be observed with composts in general.

It is to be used only for such plants as are known to grow naturally in peat, or those which are known to thrive best in a very light sandy soil: also to be mixed occasionally with Loam, for such as delight in an intermediate compost.

Most plants grow remarkably free in peat during the summer season, if kept carefully watered, particularly those which come under the denomination of half herbaceous or biennial like plants; yet, even these, are often liable to perish in winter, on account of the extreme lightness of the soil, and the cold necessarily produced by frequent watering.

Shrubby, hard wooded, and fine fibrous rooted plants in general, thrive very well in this and loam, mixed in about equal proportions; but I think it by no means suitable to fruits. It is seldom used by itself except for heaths, Botany Bay plants, and the general productions of Northern America, to all of which it seems particularly adapted.

Sand is rarely used simply, except for striking cuttings of the two first of the above mentioned plants; viz. heaths, and Botany Bays; for which it is peculiarly suitable; their fine hair-like fibres not having strength to vegetate in stronger soils. An inch or two in depth on the surface is quite sufficient, as it is intended merely to strike the cutting in, the lower part of the pot being filled with peat, into which the young fibres will soon penetrate, and draw therefrom the principal part of their nourishment as from their parent soil: it should be kept moderately moist when used in this manner, otherwise, from its natural drying quality, it would soon parch up and destroy whatever cuttings may have been put therein.

The soil of the interior parts of Southern Africa being for the greater part excessively sandy, a considerable portion of it should be used in the composts intended for the productions of that country, both of woody, herbaceous, and bulbous species.

Pit sand should be invariably preferred for this purpose, it being, of a more lively vegetating nature than river or sea sand, and if we